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Cost of Road Improvements.

Road building in Massachusetts has reached a point where large and very definite results may be pointed out. There are 415 miles of completed State road out of a total of 1366 miles for which petitions have been received. These petitions came from 281 towns and twenty-five cities, showing that the country districts are after their share.

The counties are obliged to pay one-quarter the expense of construction, and the amount assessed on the counties during 1902 was \$125,000, while about fifty-seven miles of road were built. These fifty-seven miles cost the State about \$500,000 and the counties \$125,000, or a total well over \$1,000,000 per mile. In considering the enormous cost, however, it should be remembered that difficult and costly sections are usually selected, where expensive grading or drainage are necessary.

The repair bills, which it was at first supposed would be light, are fast becoming an important item. The towns pay \$50 per year toward repairing each mile of State road, and the State does the rest. In 1902 the total cost of repairs was about \$80,000, of which the towns paid about \$17,000. Hence the cost per mile is nearly \$150 per year, although some of the roads are new and none have been made many years. It is already evident that in this climate no road will take care of itself, however well built, and maintenance as well as first cost must be reckoned in figuring out the burden of a complete system. No doubt the road-building idea is immensely popular, especially in the smaller towns. It is felt that the improvement must come, and taxpayers do not find fault except, perhaps, in large cities, where not much is practically known of country-road problems. Yet any plan that makes communication easy between country and city is a help to all classes, and the fact is becoming more fully realized yearly as the plan of the State roads gradually approaches completion.

Conditions of Cranberry Culture.

The past year has been a favorable one for cranberry growers. A large crop was harvested in good condition and sold at a profitable range of prices, quotations at times reaching \$15 per barrel for fancy qualities. One year after another this berry is among the best for profit.

But the business is something of a natural monopoly, because of the capital, skill and time required to get a bog into full bearing, and because few locations offer the right combination of conditions. Climate should not be too frosty. The bog should be easy of access, easily drained or flooded at will, and close to a good supply of sand. Many farms have small unused bogs or swales which might be made to pay interest on the whole value of the farm. The cash outlay is not large if conditions favor, and most of the work can be done at the seasons when labor and teams can be spared.

With the most favorable conditions it is a serious undertaking to start a large cranberry bog. Brush, trees and sod must be taken off, ditches must be dug for drainage, and the surface must be graded and leveled to favor sanding, flooding and harvesting. At least three inches of good, clean sand must be spread on, after which the bog must be set, the plantation usually started in spring. But a first-class bog must have facilities for flooding over winter, at least enough in summer to kill insects, and at once or more at harvest time when water is needed to protect against early frost. A bog thus supplied with water is far more valuable than one unflooded, since the bog is practically insured, while the unflooded bog fails in seasons when, by reason of the failure itself, prices of the berry are high. Flooding is often managed by damming a good-sized stream and flowing the water through side ditches over the bog, opening the gates of the dam as the flooding is finished. The difficulty is that a large, sluggish stream cannot be under full control, and water is liable to damage other land or even injure the bog itself by staying on too long. Another plan is to make one or more levees from a small stream, letting out the water as needed. This supply may be regulated, but it is under full control. The most productive and reliable bogs in New England are flooded in this way. Still another plan, more common West than East, is to pump the required supply of water from a large stream, the wheels or pumps discharging directly into the bog. The expense of operation by this method is, of course, considerable.

It will be seen that a large amount of hard work and good management goes into a first-class cranberry bog. Contractors reckon the job at \$200 to \$300 per acre, the smaller figure being for a meadow prepared without means of flooding. After the plants are set, no large crop is to be expected until the third year, so that patience as well as capital is required. The average farmer dreads such a heavy task followed by a long wait, and the result is that many bogs that might become more valuable than all the rest of the farm are allowed to remain idle. A reasonably good bog should average one hundred barrels per acre after the third year, and with some repairs will continue to bear for a lifetime. Expense of marketing is not especially large. After once established the business is not especially difficult, since bearing bogs have been sold to inexperienced buyers, and by them often successfully managed.

Old growers hesitate to advise others to start plantations, partly, of course, from a fear that the limited market may become overstocked, as, in fact, is already the case whenever the crop is unusually large, and partly because of the risk in selecting a location and expending the capital for its development. Money has been lost on swamps that could not be properly drained and flooded or which could not be sanded. A prominent grower when asked about the outlook for beginners, replied: "I will not advise you to go into the business, nor dissuade you from it. Money has been both made and lost in it, but one thing I will suggest, that, at first, you go slowly. I have spent dollars when cents would have sufficed, and I am getting cents when I should be getting dollars." This is perhaps as good a summary as can be suggested. No one can study the business long without being convinced that the demands, as well as the rewards, are somewhat larger than in most other branches of fruit growing. The safest plan for the farmer who owns a small bog which experts tell him could be developed, is to do the work in the slack season without cash outlay. The labor so expended will be like savings loaned for several years, but the final rate of income should prove very satisfactory.

Farm Hints for April.

HIRED HELP.

Desirable men are scarce and high this year. Even foreigners just landed, and not able even to boss a team in English, expect good wages. Some men will be given work and brought to the farm to live, who are neither competent helpers nor fit to live in a decent family. A few dollars saved by hiring such men is poor economy. The question is no doubt a serious one. In some localities farmers report that nobody can be hired at anything like a reasonable price. But in most cases a little enterprise would soon find a helper. The city employment agents, some of them, make a specialty of supplying farm labor and can offer a choice from among quite a number on their list. A small advertisement in an agricultural paper will usually bring numerous applications for the position, and those who apply in this way are of the best and most intelligent class.

EARLY VEGETABLES.

Such crops as early peas ought to do most of their growing very early, and they need a good supply of nitrogen before there is warmth enough to release what there is in the soil and manure. Hence a sprinkling of nitrate of soda in the row at planting time is a great help and will show all along in color and growth of vines. The same chemical will push along early turnips, beets, sprinck, cauliflower, cabbage, rhubarb and the like. Some asparagus growers say that a spring dressing of nitrate pays them well, although it is hard to see how the chemical can affect the spring crop, since the sprouts are believed to be made up almost wholly from the food stored in the roots the previous season. Vegetables under glass should be growing rapidly as the days become longer. On bright days the heat may even be intensified by inside the frame, and besides the usual airing it may be well to give the glass a thin coat of whitewash. Cabbages and other hardy plants may be transplanted as soon as large enough, leaving more room for the other plants.

The combination garden tools on wheels are a great convenience for all crops grown in narrow drills. By their accuracy and regularity they make the seed go a great deal further and with fewer gaps than by hand sowing, while the straight rows are much more easily tended throughout the season. After planting time the drill is taken off and the implement becomes a wheel hoe of various patterns. These hoes drive rather hard in stiff soil and should be used often to prevent the earth from settling down too hard and kill the weeds before large enough to clog the tool. A farmer who has tried a good, sharp wheel hoe on a large onion patch will not care to do the work by hand another season.

THE ORCHARD.

Grafting may still be done so long as the scions were taken early and have been well kept. In fact, with good scions common cleft grafting can be done up to July. But the graft set about the time the buds are ready to start will make the best growth and be most likely to live. Pruning is, of course, in season if not attended to before. Young trees should be planted as early as possible to allow them time for a fair start before dry, hot weather. Chemicals and manure should be applied to trees if not done in March. If some of the young trees do not seem to be making a good growth a handful of nitrate of soda will brace them up surprisingly. Examine for San Jose scale and destroy small trees if infected. A young orchard that has been cropped for some years between the rows until crops fail to pay because of lack of vegetable matter in the soil, should be sown to clover for plowing under.

THE APIARY.

Hives should be taken out of winter quarters and placed upon the summer stands, handling each hive carefully enough not to cause general disturbance. Choose the first warm, pleasant day after pollen is plenty on willows, maples and alders. Set them out rather late in the day, so that there will be plenty of time for a good flight, but not time enough before night to encourage robbing. Strong, well-fed colonies ought not to suffer much from spring dwindling during a season like that of the present year. But if there are hives in which the bees have died, do not throw away the combs, no matter in how bad condition. Later in the season, when needed, put them in the hives, one at a time, and see how quickly the bees will clean and repair them. Beginners will find the opening of the season a convenient time to buy. It is best to visit a practical bee man and talk with him as

as late as the last of May, and if well out back they will in most seasons live and make a small growth for the year.

A Pennsylvania Apple Section.

Apples in considerable quantities and of superior quality have been produced in Wayne County, Pa., for many years. On nearly every farm there is an apple orchard of from five to twenty or more acres. Some of these orchards are old and the trees have grown to immense size; but the majority of them are young, having come into bearing within the last few years. The leading varieties are Northern Spy, King, Greenings, Baldwins, Pippins and the Russets. There has been annually a few thousand barrels of apples picked and shipped to the city markets, and the crop has long been an important byproduct of the Wayne County farm, but not until the past season did the farmers realize the real value of the crop. The yield was exceptionally large. It is

The New Land Bill.

Ireland has been made by the force of circumstances an agricultural country, and it is useless now to cast reflections on the English competition which made manufacturing and commercial enterprises unprofitable in the island. It has been said often that there is no friendship in trade, and though this is a rather cynical remark, there is, perhaps, more truth than poetry in it. Be that as it may, it has been long understood that the majority of the people of Ireland got their living by farming under somewhat hard conditions. They were often at the mercy of spendthrift landlords, living out of the country, who entrusted the care of their property to exacting middlemen. These agents frequently extorted extravagant rents in unproductive seasons, and when the tenants made profitable improvements would lease the farms over their heads to higher bidders. There was little or no encouragement for a farmer to be thrifty and forward, for if he made a holding valuable by incessant toil in turning bad land into good, the landlord, through his agent, would be likely to increase his rent. The land bill, which Mr. Wyndham, the chief secretary for Ireland, introduced in the House of Commons on March 25 in behalf of the Balfour cabinet will, if it becomes a law, do away with many of the evils which the tenant farmers have so long endured, not without, it must be confessed, a good deal of "kicking," which sometimes resulted in violations of law and order. It will be remembered that recently there was a land conference of representatives of landlords and tenants, and that satisfactory conclusions were reached. These have been reproduced in the bill, and they provide, among other things, for the buying of the holdings by their occupants with money advanced by the Imperial government. This is to be repaid in time, and in the meanwhile the English government will be relieved of a great expense by the reduction of the police service in Ireland. If the bill passes the House of Lords, the conservative branch of the British government, the law would become operative next November.

It must be stated that in addition to the loan the British government is expected to give a free gift of \$60,000,000, to be used by the tenants in meeting the difference between the landlords' prices and what the tenants think they can afford to pay. The amount to be actually loaned to enable the tenants to buy the land will be in the neighborhood of \$500,000,000, which will be borrowed at 2 1/2 per cent, and loaned to the purchasers at 3 1/2 per cent. This is a large sum of money which it will take many years to pay, but it is expected that it will not tax the British treasury too heavily considering the benefits that will result. Ireland has been rapidly losing its population through emigration in the last fifty years, and if this remedial legislation becomes effective, it may keep the Irish people at home.

Milk Yield of Good Herds.

A prospective farmer, J. L. K., Dorchester, Mass., inquires of the probable product and profit from a good milking herd. A herd of twelve cows "worth \$60 each, kept on a fairly good New England farm, in good clean barns in winter, with silage, a well-balanced ration and intelligently cared for through the year" certainly ought to exceed J. L. K.'s estimate of five quarts per head the year round. This is 1825 quarts, and a herd which does not do better than that under liberal feeding must include some poor cows.

Milkmen, by occasionally exchanging a spent cow for a fresh one, often keep the average well up to ten quarts. Some of them do this without changing cows to any extent. A Connecticut milkman of my acquaintance with forty cows, all bought of farmers, and none costing over \$55 fresh, has no cows averaging as low as your estimate. Several of them have given over eleven thousand pounds per year, or over eleven quarts per day average, the quality also being well up to standard. His herd averages close to ten quarts per head. It would seem that any skilled buyer and feeder might do as well. Even if prices are high now, it is better to pay for good cows than to submit to a low average yield. The cost of keeping a cow is in the neighborhood of \$40 per year. The 1825-quart cow at three cents per quart would return \$54.75, or a profit of \$14.75. The 4500-quart cow would return \$135, or a profit of \$95. Nobody can very well buy a business herd which will be all of the best cows, and if he did, some of them would for one reason or another fail to do their best in any given year, but a shrewd buyer with cash in his pocket ought to have no great trouble in gathering together a herd of cows, ranging from 2500 to three thousand quarts per year right along. He should be content with nothing less, whatever the price received for the milk.

One of few experimental farms which pay a large cash profit is the one at the New Jersey station conducted by Professor Voorhees, who recently stated that in the herd of thirty cows which was under his care, there were cows which ranged from four thousand to 12,500 pounds of milk a year, and the four thousand-pound cow probably ate as much feed as the better ones. The feed of a cow he reckons will cost \$40 to \$55 per year, and a cow giving five thousand pounds (about 2500 quarts) of milk annually about gives back the cost of keep, with her manure and society to boot. The bane of the dairyman today is the poor cow or machine and in no other business would a man keep and use a poor machine.

The high cost of keeping cows at the New Jersey farm and also the large yield of milk is partly due to very liberal feeding of grain and silage crops. But cost and returns would be less by the ordinary pasturage system. Dr. Voorhees buys the cows, superintends the feeding and looks closely after the management of the retail route in which the milk is sold. He never offers to buy poor cows, but it is well known in the vicinity of the farm that the professor is always ready to buy an extra good cow at a good price. The result of energetic, business-like management is that the college herd is one of the best and most profitable of its size in the State. The total cost of producing milk at this station, including food, labor, interest and depreciation, amounts to about 25 cents per quart. Few other producers have figured the cost so exactly and carefully, but most estimates come rather close to that of Professor Voorhees, so far as the net cost is concerned and where good cows are kept.

Milkman Cushman of Middleboro, Mass., reaches his results in a different way, all the food given his cows being raised on the farm, so that the farm expenses are charged against the herd thus: A foreman, salary \$500 a year; four helpers, salary \$1200 a year, or about \$35 for labor on each cow; real estate to support each cow valued at \$150, and tax and interest on this \$12, personal property for each cow \$50, and tax and repairs on this \$5; value of each cow \$60; less by depreciation \$5; tax and interest on each cow \$5. If the cows average three thousand quarts of milk per head per year, and it is sold off the farm, the fertility carried away will average \$8.50 per cow. This swells the entire cost of each cow to \$72.50. The yield averaging three thousand quarts brings the cost to a little more than 2 1/2 cents per quart. With poorer cows Mr. Cushman could not meet his heavy expenses. Almost any book or paper on dairying contains accounts of the cost of production, and when everything is taken into consideration, the revised reckoning is usually two cents and some fraction per quart in the older States. As the net prices paid by creameries and milk contractors range very close to the estimates of cost, it will be seen that most milk producers are making very little money, and where poor cows are kept they are not receiving even the full market value of their hay, pasture, grain and silage. By keeping cows they maintain farm fertility. Otherwise they would often do better to sell hay and let their pastures. But when better cows are secured, the margin of profit becomes larger and larger.

It is a matter of observation that most of the poor herds are kept by farmers who also practice poor methods and very likely sell in a poor market. The best dairymen are not likely to keep a poor cow long, and their plan of management handles to best advantage the permanent members of their herd. Very often they find a special market for the milk at special prices. But the poor cow in the hands of a poor manager, and turning out a poor product on a poor market, is one of the chief agents which make some farming unprofitable.

Massachusetts. G. B. FISKE.

Western New York Notes.

Farmers are beginning to plow on some fields that are sloping and well drained. Many of the spring birds are here and have been since the first of the month. The season is fully a month earlier than usual. Grass fields are getting quite green and wheat and rye are looking beautiful.

Just now roads are in bad condition but improving. Our rural free delivery mail carrier has not failed to make his trip since the first of last April when the route was established, except over a part of the route one day owing to the fault of the overseer of highways in failing to break out the road. This is certainly doing well on a route where before it was established some said it was practically impossible to deliver mail in the winter time. As time goes on it will doubtless be seen that farmers have enterprise enough to keep the roads broken out so that they may receive their mail daily. It is done in places where there is far more snow than we get here.

As the time for working the soil approaches, farmers naturally begin to look about to see where they can get the seeds they may want to sow and plant, and so the seedsmen's catalogues are really an interesting and useful publication. The most interesting one I have seen this year is from the house of Ross Bros., Worcester, Mass. Farmers ought to peruse it. Seed corn is scarce this year, but luckily the writer saved some fine seed corn last year for his own use, but none for sale.

The Brighton Grape.

This variety has often been termed the best of the red grapes. The claim is probably true for Northern climates, at least, as the Brighton ripens considerably earlier than most other good grapes. It can be successfully grown where the Concord fails to mature, and has the desirable characteristic of becoming fairly sweet and eatable before it has fully colored.

The flavor is delicious, vastly better than that of the Concord and other early kinds, being sweet to the center and free from rank or foxy qualities. The bunch is large and compact, the berry of medium size and light red in color. The vine is a good grower. It has weak points as a market grape, being much less productive than varieties like the Concord, and the color of bunch being rather light and uneven. For home use and choice local trade it is excellent. A few vines should be grown on every farm.

Why should not the intelligent farm dog be classed as live stock? At least he often has a place at the very head and fore of the finest herds and flocks in the land.

March, march, march; the boys were marching!



BRIGHTON GRAPE.
See descriptive article.

such as possible about details of care. The bees, which should be Italian or part Italian, may be brought home in a spring wagon, tying a piece of cheesecloth over the end of the hive and plugging the entrances. Hives properly fastened and covered with wire cloth may be shipped by express. Better start with a very few hives only and study the business in bee books. Bees should be taken from at least a couple of miles distance or some of them will return.

SEED POTATOES.

It is surprising how many still use considerable whole seed. They plant in hills wide apart, and drop perhaps a whole small potato and half of a large one to a hill. The result is a big per cent. of small, pig potatoes in the crop, besides a great waste of seed potatoes. Far better to plant only a foot to eighteen inches apart and only one or two eyes in a place. Almost every eye will grow, and one in a place is far better than a dozen, some of which will be from the weak and worthless seed end. This plan gives small hills, but big potatoes and lots of them, with very few to be picked out as waste. The seed tip should be cut off and thrown away, and the rest cut lengthwise to give one or two eyes to each piece. It is best to plant soon as possible after cutting. For early potatoes something may be gained by sprouting the potatoes in boxes in a warm, sunny room or in the pit of a hotbed.

SETTING OUT TREES.

Straight lines in an orchard will prove a lifelong satisfaction. An even start, careful measurement and the use of cross furrows will secure good alignment and also save work in setting. The furrowing and cross-furrowing will save much of the shoveling, particularly if the furrows are deepened with a subsoil plow. Make the holes large and fill about the tree with soft rich earth, but no manure close to the roots. Bruised roots should be trimmed and the tree branches cut back. In wet seasons, a well-rooted tree will sometimes thrive without cutting back, but such a method is on the average not desirable. Late-set trees, especially, need severe cutting back. Trees in storage can often be bought very cheap

ly estimated that there have been between 1200 and 1300 cars of apples shipped from the county this season. One buyer at Honesdale, the leading shipping station, purchased from the growers 79,700 barrels, of which only a few thousand remain in cold storage, the bulk of the crop having been shipped to distant markets. The price paid ranged from seventy-five cents per barrel early in the season to \$1.50, the present price.

Many apples were frozen in the cellars during the extreme cold weather of winter, and some farmers who held their apples and resorted to them during January and February, found a large proportion of badly speckled and decayed fruit. The vast quantities of apples barreled, together with the many bushels used for home consumption and marketed in nearby mining towns, give some idea of the greatness of the season's crop.

Wayne County orchards are not so thoroughly or so intelligently cared for as the western New York orchards. The farmers do not spray, and as a result many apples were imperfect and ought to have been evaporated instead of barreled. Careless packing by incompetent packers and indiscriminate mixing of varieties caused some just complaint from customers and injured the reputation of the county, which will require years of careful sorting and grading to wholly overcome. A large number of farmers have met with losses through the failure of buyers to keep the fruit contracts. Notwithstanding these disappointments, however, farmers are making extensive preparations to increase the production, and improve the quality of the fruit and methods of handling it. They are removing worthless trees from their orchards, reading the farm and horticultural journals, investigating the subject of fertilization and other topics relating to apple growing.

With the same attention given Wayne County orchards that is given those of western New York, this will develop into one of the best apple-producing sections in the United States.

ELMER E. REYNOLDS.

Wayne County, Pa.

Dairy Products Steady.

The situation shows but few changes since last week. Quotations average about as then recorded, a few fractional changes downward being nearly balanced by slightly firmer prices for other grades. Receipts of fresh made begin to show some increase, and the time of year is approaching when the output of creamery should be considerably larger. But as yet the supply is light, and the demand good, a little better perhaps than prevailed last week. In Boston the top price for large lots is 27 cents, and this is for a grade reached by only a small proportion of the receipts. The bulk of sales are made at 25 to 26 cents or lower. The supply of second grades is liberal, and these are not in great demand. Much of the storage stock now remaining is not of the very highest grade, and will not bring over 23 cents. Dairy lots showing new milk flavor sell at 24 to 25 cents. Export grades are not selling freely, the prices not being low enough to tempt shippers. Now and then a lot is picked for this purpose at 14 to 16 cents. Foreign markets are reported unchanged for export grades, and some American butter could, no doubt, be taken care of if the price were a little lower.

Prices at New York have ranged somewhat above the Boston level, best creamery being reported at 29 cents and even a fraction higher for a few fancy lots. Grades below the highest are not in special demand. The best old storage now in stock brings 24 cents, but most of it rules lower on account of inferior quality. It is complained that much of the new creamery from northern New York is coming too heavily salted. The supply of Western creamery is somewhat limited by the condition of roads, which hinder the delivery of milk and cream at the factories. It is believed that these conditions will improve within a fortnight, and that the supply from Western sources will be plentiful. Renowned butter is plenty, and most of it so poor that nobody cares to buy it.

Cheese holds as firm in price as ever, with the supply light on all grades. Now and then sales of best grades are reported at a little above even the top quotation of 14 1/2 cents. Under grades bring full quotations. At New York the market shows no special features, demand being moderate and fairly satisfactory. Exporters are willing to buy when ever suitable lots can be had, but holders are unwilling to encourage sales by making concessions. Winter-made cheese shows considerable variation in quality. Skims are in rather scanty supply and very firmly held. During the week from 1200 to 1500 boxes, mostly at 14 cents, have gone to exporters, and the amount actually sent abroad for the week was 2800 cases.

Some interest has been shown among the dealers by the new Western idea of making cheese in prints like butter. More consideration in this direction seems to have been given in the past to butter than to cheese, and, excepting some high-priced small packages and jars, cheese is still generally made in large sizes, which are out to awkward slices at grocery stores and sold by the pound.

One of the most popular butter packages is the one-pound print. In some markets print butter is quoted one cent or more above the ruling price of other butter, which may be of the same quality, but is put in a less attractive package. This popularity of print butter shows that it is profitable to study the market demands regarding the shape and the appearance of dairy products, as well as their flavor, texture and other qualities.

On account of the demand for print butter, the manufacturers have designed a number of machines and appliances for economically moulding the butter into print forms. These machines vary somewhat in their construction and manipulation, but they all make the one-pound print of about the same dimensions—2 1/2 by 2 1/2 by 1/2 inches. In some printers a carved board is placed on one side of the mould into which the butter is pressed and this makes an impression in each print of some design or letter which has been selected as a brand or trademark by the manufacturer. So much attention has been given to the subject of butter printing that the details are now satisfactorily worked out.

"The favorable reputation which print butter has attained suggested the possibility of applying the idea to the manufacture of cheese. Why cannot cheese, as well as butter, be moulded into one-pound prints? After studying this question for two years, it is possible to say that this new form of cheese can be made, and that it is received with much favor by the consumer. The first print cheese was made at the Wisconsin Dairy School during the winter of 1898-99. Since that time some of the details have been changed, but the general plan of the operation is the same as originally carried out. In so far as the cheese is concerned, no deviation has been made from the usual process of making cheddar cheese, except a modification in the pressing and the 'follower' used in the press."

None of this cheese seems yet to have reached the Eastern markets, and dealers appear somewhat doubtful of its reception, unless it be used to set a special quality of cheese.

Receipts at Boston for the week (54,740 pounds butter, 2037 boxes cheese, besides 277 boxes for export, and 58,571 cases eggs, compared with 556,958 pounds butter, 2100 boxes cheese, besides 5595 boxes cheese for export, and 39,204 cases of eggs during the same week of last year. Receipts for the month of April were 2,315,200 pounds butter, 8901 boxes cheese, besides 11,543 boxes cheese for export, and 115,911 cases of eggs. Compared with receipts during April, 1902, of 2,316,742 pounds butter, 8929 boxes cheese, besides 10,901 boxes cheese for export, and 100,667 cases of eggs.

Receipts at New York for the week 31,550 packages butter, 12,250 packages cheese, 136,500 cases eggs, compared with 29,098 packages butter, 12,157 packages cheese and 115,419 cases eggs for the corresponding week of last year.

New Sugar Scarce and High.

Considerable new sugar is on the market, but the high prices show its scarcity, small cakes being 14 to 20 cents a pound, and bricks sell at 12 to 15 cents. The best syrup is quoted at \$1 to \$1.25 per gallon.

The sugar orchards have now been tapped for over two weeks, the tapping having been done earlier than for several seasons on account of the early spring, but thus far only two good runs of sap have been secured. In order to have good runs of sap there must be frosty nights and warm days, and there has been very little of this kind of weather. The days have been warm enough, but the frosty nights have been lacking.

The trees have begun to bud, and the farmers say that even if the weather should change and good runs of sap be secured, the

quality of the sugar would be decidedly inferior, because of the trees having budded. Many of the sugar-makers had made contracts, before the season began, to supply firms in the cities with large quantities of sugar, and to fulfill these contracts to the letter would be a practical impossibility. Some sugar-makers have given up hopes and are putting away their apparatus.

Patriotic Memories.

Something About the Stamp Act and the Boston Massacre.

BY BENJAMIN F. STEVENS.

After the capture of Canada by the British from the French in 1760, sixteen years prior to the Declaration of Independence, almost every act of Parliament was framed on the sole idea of coercing the trade of the colonies toward Great Britain, whereby the mercantile community were in a constant state of trouble, a memorable source of which was the passage of what was called the "Acts of Trade," when fifty-eight of the best-known merchants of Boston memorialized in General Court in opposition to the powers of the Crown, and asked that no "Writ of Assistance" be granted by which the Custom House officers could put in force those acts. The question was carried to the Supreme Court and James Otis, Jr., then occupying the office of advocate-general in the Court of Admiralty, resigned his office under the Crown and espoused the cause of the merchants to resist the Custom House authorities, and thus he began his career as a patriot. History tells us that "he burst forth as with a flame of fire in the force of his eloquence," which seemed to indicate that the principles of freedom and independence were not to be controlled by kingly power; "that taxation without representation was tyranny," and if the colonies were not to be represented in Parliament they would not bear any of the expenses thereof. Notwithstanding the ability of Otis, the Supreme Court decided in favor of the pretensions of the Crown and officers of the customs.

James Otis, the patriot, was born in Barnstable in 1725, graduated at Harvard, and was ever an eloquent, energetic and uncompromising advocate of the liberties of the colonies as against the harsh treatment of the Mother Country. His great speech in 1761 against the Writ of Assistance has been described by John Adams, then in his twenty-sixth year, in language which is or should be familiar to every schoolboy in the land. So great was the animosity of the British against him that he was cowardly assaulted to such a degree that his reasoning faculties were injured for life. He was killed in 1783 by a flash of lightning while standing in a doorway in Andover, that year in which Great Britain acknowledged American independence, which he had done so much to secure. Probably no other one of the shining galaxy of patriotic men of Colonial times had the strength with the people that this great man had until his career was cut short by the myriads of the lightning bolts of the Revolution. What he would have been had his faculties been preserved to him must be left to the imagination, but so highly was he thought of as a man, so patriotic, so courteous was he, it would seem he must have had the highest place in the hearts of his countrymen.

In 1765 King George III. signed the Stamp Act, which levied a duty or tax of half a penny to twenty shillings on every piece of parchment or paper on which anything should be written or printed. The colonists through the length and breadth of the land were aroused to indignation; riots ensued, and in Boston, Andrew Oliver, the secretary of the province, who was appointed distributor of the stamps, was hung in effigy, and a boot (Lord Bute) with a devil peeping out of it with the Stamp Act in his hand, was found suspended on Liberty Tree, opposite where the Boylston market formerly stood. All business was laid aside for the day, the people could not be appeased and they proceeded in a large body to Kilby street to a building supposed to be intended by Oliver for his stamp office, and demolished it in the twinkling of an eye, bearing aloft a portion of the ruins to Fort Hill, where they made a bonfire of it in full view of Oliver's house, whereupon Brother Oliver, being somewhat frightened, declared he would not directly or indirectly introduce any of the King's stamps into the market. And so the colonists won, the odious law being, by a change in the ministry, repealed. This was the first gun of the Revolution.

It may be of interest to our readers to know, if they are not already aware of the fact, that the term, "Sons of Liberty," as applied to those colonists who believed that taxation without representation was a bitter wrong, originated with Col. Isaac Barre, a British soldier and statesman, who was the intimate friend of, and fought with, General Wolfe when the latter defeated Montcalm on the Heights of Abraham, before Quebec. Barre occupies a prominent position in Benjamin West's famous painting of the "Death of Wolfe." After recovering from the wounds received in that battle in which General Wolfe was killed, he entered Parliament, and through the entire ministry of Lord North stood the firm friend of the colonists. The generous spirit of Colonel Barre shone conspicuously in his reply to Charles Townsend, who held that the colonies had been planted "by our care, nourished by our indulgence and protected by our arms," to which the friend of the colonies replied, "Remember this day I tell you, the same spirit of freedom which has ever actuated that people will accompany them still. The people, I believe, are as truly loyal as any subjects of the King; but a people jealous of their liberties and who will vindicate them if ever they should be violated." Later on Colonel Barre predicted that the course of the British ministry would lose the colonies to the Crown, which it did, and thus the most precious possessions of Great Britain passed into an independent nation.

Passing over considerable history running through a period of five years subsequent to the Stamp Act, which is exceedingly interesting but too long to be quoted here, we come down to the year 1770, when another British aggression was forced upon the Boston people, giving rise to one of the most dramatic events in Colonial history, the "Boston Massacre," about which we have all read so much, and have learned to look upon with so much awe and respect. The feelings of the colonists, it must be understood, were constantly being fomented by duties laid by Parliament upon articles of British manufacture, such as glass and colors and even tea, the product of the East, was included, the ministry claiming that these taxes were for the support of the colonies by granting salaries to the governors and judges, and for appointing a permanent administration of the customs the colonies having little or nothing to do with their own government. But "No Tax without Representation," originally raised by James Oglethorpe, had not been forgotten;

whereupon the people of Boston resolved to encourage the use and consumption of all articles raised or made in the colonies, and not to purchase any of the enumerated articles imported from abroad. For instance, at funerals not to use any gloves but of Colonial manufacture, or purchase any new article for such an occasion but those absolutely necessary. And so the bitterness toward the Mother Country grew, until, in an evil hour, the lad Christopher Snider, who had been the recipient of a victim of Royalist misrule, was killed by an informer, one Richardson. This little boy was buried from his father's house on Boylston street, the remains being preceded by five hundred schoolboys, and the pall supported by six of his playmates, followed by thirteen hundred citizens on foot, the procession closing with a multitude of vehicles.

But "the handwriting on the wall" could not, or would not, be expounded by the British ministry, who began, in utter ignorance of the popular feeling against tyranny and subjection, to draft or quarter regiments of soldiers upon the people of Boston, as well as to fill its harbor with men-of-war. A detachment of the Fifty-third Regiment and a train of artillery with two guns, landed on Long wharf and marched up King (now State) street, each soldier having sixteen rounds of powder and shot. Another regiment marched to Brattle street, where the old City Hotel formerly stood; and another had quarters in Water and Congress streets. Sailors and laborers were afraid of being impressed, and every act of the Colonial government not only had the appearance of, but was coercion. The people, who had since Otis' time been fretful and almost ready to grapple with the constituted authorities, were now loud in their denunciations of this last unwarrantable act of oppression. They, although not born to the purple, were just such men as kings were made of,—aye, better by far than the imbecile head who adorned the British government, an obstinate, bull-headed pigmy, who allowed his precious colonies, the best part of his possessions, to slip through his fingers, never to be regained (for which see Thackeray's "History of the Four Georges"). Why, there seemed to be a curse even upon those thought to be sensible Englishmen; even Dr. Johnson himself, one of the greatest of minds, wrote such silly pamphlets about the colonies and their adherence to the Crown that one wonders at his want of knowledge of men of the day. The people of the colonies and their cause were not understood, and the people never have been understood when the murmur is heard which always goes before a storm.

And so the British troops occupied the streets of Boston. Let us turn to the Boston Gazette of March 12, 1770, seven days after the troops fired upon the multitude in King street. The paper is surrounded with a black border, and, besides a most interesting account of the tragedy, contains the skull and cross bones, one marked S. G. (Samuel Gray), another S. M. (Samuel Maverick), a third J. C. (James Caldwell) and the fourth C. A. (Crispus Attucks). The last two were strangers, Attucks having been born in Framingham, and Caldwell apparently unknown. Maverick was a lad of seventeen years, while Gray was somewhat older. There were, besides, seven or more dangerously wounded. That the soldiers who fired upon the multitude may have had some provocation is not to be denied, but the authorities had warning enough that there was danger in the air through the intervention of such men as James Otis, Thomas Cushing, John Hancock and Sam Adams. The whole affair was the sad result of quarreling troops among citizens in time of peace, under the pretence of supporting the laws and aiding civil authority. In reality these regiments were here to enforce oppressive measures and to awe and control the legislative and executive powers of the British government, to say nothing of endeavoring to quell the spirit of liberty. The patriots of that day, foremost among whom were those we have mentioned, were far-sighted men, who thought it their duty to try all means to avoid trouble, and they did try by all the representations in their power, but Gov. Francis Bernard and his coadjutors would not be convinced. The troops were allowed to remain, and the men-of-war stayed in the harbor until they had occasion to run down to Halifax for a new lot of red coats. The soldiers had had some trouble with the citizens on a prior occasion, but it was not until the evening of the fifth of March that what is now known as the "Boston Massacre" took place. On that evening several soldiers of the Twenty-ninth Regiment paraded the streets with drawn cutlasses and bayonets, abusing and wounding numbers of the inhabitants. About nine o'clock, four youths, perhaps from sixteen to twenty years old, came down Cornhill, and while they were passing a narrow alley leading into Brattle street, they saw a soldier brandishing a broad sword against the walls, out of

which he struck fire plentifully. One of the lads admonished one of the others to look out for the sword, whereupon the soldier turned about and struck him with it over the arm, and dashed at another, piercing his clothes and grazing the skin. One of the youths then struck the soldier with a short stick, and soon the noise brought soldiers and citizens together, and there was a general fight, no one being, however, much hurt. Then the soldiers, with the citizens, who had gathered without the slightest intention of engaging in a riot, turned down Cornhill into King street, when they met Captain Preston with a party of men with charged bayonets, who had come (probably upon hearing the noise) from the commission-er's house. They took their stand by the Custom House, which was then where the Merchants Bank is now, and began to drive the people away, whereupon it is said that some threw snowballs at the soldiers. It is very likely they did, if, as we have reason to believe, there were lads among them. Upon another volley of snowballs being thrown, the order was given to fire, and about eleven guns were discharged, and the dead and wounded lay in a heap. The old engraving by Paul Revere doubtless gives a very accurate description of the locality, the buildings, and, in fact, the whole scene as it occurred on that night.

The news of the "massacre," as it was called, spread like wild fire; the bells were rung, and a vast multitude assembled at the place of the tragedy scene. While some took care of the dead and wounded, the rest were in consultation; but so little intimidated were they that, when the Twenty-ninth Regiment marched up King street, these patriots kept their station. As expressed by an officer, "They were ready to run upon the very muzzles of our muskets." The authorities at once went into the Town House, where a considerable body of the people appeared and expressed themselves with a freedom and warmth becoming the occasion. The people insisted to the lieutenant-governor that the regiment under arms should be ordered to the barracks, to prevent further bloodshed, which was done. Captain Preston and the soldiers who were known to have fired were committed to jail. They were released in the following October, and defended by those eminent patriots, John Adams and Josiah Quincy, and all but two were acquitted. These two were convicted of manslaughter, branded, and sent to Castle Island. From 1770 to 1783, inclusive, the day was celebrated by an oration, tolling the bells, etc.

The occasion of the funeral of the victims of this massacre—Samuel Gray, Samuel Maverick, "the only son of his mother, and the widow," James Caldwell and Crispus Attucks—was said to have been a most solemn occasion. All the shops in town were closed, and all the bells in the city, as well as those in Charlestown, Roxbury, Dorchester, etc., tolled a solemn peal. The procession began to move between four and five in the afternoon. The two strangers, Caldwell and Attucks, were borne from Faneuil Hall attended by a numerous train, and the other two, Gray and Maverick, one from the house of his brother, Benjamin Gray, on the north side of the Exchange, and the other from the house of his widowed mother on Union street. The several hearse formed a union on King street, where the dreadful tragedy had occurred, whence they were preceded by an immense throng of people, not only from the city, but from the neighboring towns, in ranks of six, and followed by a long train of carriages. The bodies were deposited in one vault in the Middle Burying Ground, now the Granary, opposite Bromfield street, in Tremont street, where the remains now rest.

May it be a long time before the event of "The Boston Massacre" is banished from the mind of the patriotic youth of our country.

Literature.

Mrs. Humphrey Ward presents in her latest book, "Lady Rose's Daughter," an old, yet ever formidable truth, namely, that the sins of the fathers are visited upon the children. The story opens with the introduction of Miss Le Breton, who is the illegitimate daughter of Lady Rose, who forsook her position in one of the fine old English families of rank, and left her husband for a wandering Bohemian artist, who loved independence above all else. Mrs. Ward tells us that these two live happily in poverty and worldly disgrace, bringing into the world a daughter, who, orphaned at an early age, is left to battle for herself. This girl, having taken the name of Miss Le Breton, secures a position as a companion to Lady Somerset, and at her salon meets and comes to know many of her relatives. We are told that this Miss Le Breton feels no shame at the position her parents took; instead she possesses the instinct of intrigue to such a degree that she becomes a vulgar schemer for her own advancement and also that of her lover.

It is because of the latter, a sort of worthless fellow, who is willing, because of money, to accept a position in the world from a woman when he is engaged to another, that is the undoing of Miss Le Breton. It nearly results in her dishonor, but she is saved by the true, generous love of an honest gentleman who in time wins her love and herself. The fine work in the novel is the skill exhibited by Mrs. Ward in the development of her heroine, from a haughty, intriguing, selfish girl, to a broken, humble woman, rising through the help of the great love of the man who saves her, first from dishonor and secondly from herself. Her character is difficult to understand. One must remember her parents and their dispositions, which would allow them to do and live as they did without remorse. Although the author leans to the safer side, that of conventionality and law, yet she does not preach against Lady Rose's act or condemn it. It is rather presented to us as if it were best not to ignore society's and religion's laws, but that love is unanswerable, it is right when it is true. Some such teaching is set forth in Gertrude Atherton's "Senator North," where a girl loves a married man who secretly courts her, and is delighted when his wife's death sets him free to marry, although hitherto the respect of his sons and society at large holds him back.

Such situations exist as we all know, but it were as well if the novelist did not use them in such favorable lights. One likes better the somewhat stern teachings of self-renewal, duty and right. "Lady Rose's Daughter" is free from that hysterical emotion which marred "Eleanor," although some scenes savor of sensationalism. But, on the whole, the author has shown her power of psychological insight and her ability to express convincingly the struggles of a human soul. She shows each character true to its own peculiar traits, and never does she forget to exhibit each in its entire personality. Sir Wilfrid in his role of general confident and disinterested critic, Lady Henry in all her bitter-tempered household tyranny, the child-like duchess with all her foolish yet unselfish devotion to Miss Le Breton and the two lovers, are all comprehensible and human; they are real, living, breathing people, to whom temptation is common. The book is a departure from Mrs. Ward's usual style which characterizes "David Greave" and "Robert Elsmere," two preaching novels. In "Lady Rose's Daughter" she does not sermonize at all, and although she has been accused of not inventing the main theme of her plot, yet one can feel whatever has been taken has been thoroughly made the author's own, and that from the general storehouse of all literature, Mrs. Ward has not overstepped her rights. The book captures the interest at once and holds it to the end. The conclusion does not seem like a natural finish to a story, but rather the fortunes of the heroine are followed so far, then let drop. "Lady Rose's Daughter" invites a sequel, as one feels that in such a position as she has long coveted, Miss Le Breton would develop some interesting situations. [New York: Harper & Brothers. Price, \$1.50.]

A volume of verse by Lucia Gray Swett bearing the title "Sisters of Reparatrice," will make a most acceptable Easter offering. The opening poem, from which the book takes its name, describes the life of a sisterhood in Genoa which, Donadio, a celebrated prima donna, joined many years ago. Her singing for awhile attracted great crowds to the chapel of the convent, but was discontinued because the Marquis of Reggio, the late archbishop of Genoa, disapproved of the notice it attracted. The poet, in referring to the noted singer, says:

One among the many voices,
Sweeter, higher yet would soar.
And we said, "Tis Donadio,
Hark, she sings as ne'er before."
Yes, it was the Donadio,
Often had we heard her name;
How she turned from many a triumph,
Left applause, success and fame,
All the glamour of the footlights,
Dazzling stage and brilliant halls,
For the shadow and the silence
Of the sombre convent walls.

Some of the other poems in the volume have a quaint, old-fashioned air that makes them pleasant pictures of a time when existence was less strenuous than it is today and when manners were courtly and picturesque. One, "The Old Brocade," takes us back to the ball given in Salem for General Washington in 1780. Another says of "The Girl of Other Days":

How often I have watched her stand,
Upon a Sabbath morn,
Her hymn-book in her little hand,
Her pretty gown of lawn,
The neatly folded India shawl,
The bonnet edged with lace,
A something sacred over all
Reflected in her face!

"Our Cups of Tea" is a pleasant anticipation of a refined and quiet old age:

We'll dress in gowns of silvery gray,
With knots of ribbon, oh, so gay!
Of pink and blue in caps of lace,
On curls that nod about each face;
Our muslin kerchiefs wondrous fine,
With pins and pearls in quaint design,
And bright old ladies we will be,
And gossip o'er our cups of tea.

The other poems in the volume show a delicate fancy, and their thoughts are simply and melodiously expressed. Here is a little bit that will soon be seasonable:

Joyous children with glad voices
As they carols sing today,
Seem to hear the angel's anthem,
Almost see the golden way.

But for souls with sorrow laden,
There's a song no glad heart hears,
Easter's best, most wondrous glory,
Shine for eyes that look through tears.

The book will please all who wish to escape a while from the turmoil of the world. It is both restful and inspiring. [Boston: Lee & Shepard. Price, 80 cents net.]

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Popular Science.

—The milky sea, as it is known to sailors, is not yet fully understood. It seems to be common in the tropical waters of the Indian ocean, and is described as weird, ghastly and awe-inspiring, and as giving the observer a shipboard sensation of passing through a mist of luminous fog in which sea and sky were indistinguishable. The phenomenon is probably due to some form of phosphorescence.

—From seven diamonds—weighing from two to twenty-one carats—that have been passing in Wisconsin and adjoining States, Prof. W. H. Hobbs traces the diamond fields of North America to the volcanic region of the Canadian wilderness, south of Hudson bay. The only known matrix of the diamond is the black shale, or "blue ground"—around the necks of extinct volcanoes. The loose stones found seem to have been transported by glaciers, and on following up the probable courses of these ancient ice rivers the lines converge in the barren territory stated.

—Excessive muscular development is pronounced by an experienced physician to be not only unnecessary, but positively dangerous, in causing athletic training, which every person must do sooner or later, the system adapts itself very slowly to new conditions, and digestive and liver troubles are very liable to follow. The great lungs, not needed in sedentary work, degenerate, often leading to consumption.

—The late survey of the English coast shows a loss of land of forty thousand acres since 1870, in some places as far as New Romney, the solid ground has been pushed out two miles or more in the sea.

—By his method of feeding through the stems instead of the roots, S. A. Mokrzecki, the Russian entomologist, believes that trees and plants can be cured of disease and greatly stimulated in growth. His special apparatus is intended to introduce salts of iron—either solid or in solution—into sapwood, and he has used it for applying chemical treatments to cut and dried fruit trees on the southern shore of the Crimea. The weak and diseased condition of the trees was remedied, while an unusual development followed. As of the new field seems to be opened up, and the possible effects of dietary, administered to different plants in this way, remain to be shown.

Gems of Thought.

....Eternal life is not a thing that we are to get when we die. It is a thing that we are living now.—Drummond.

....The true moment at which to call upon one's self to take any new step in virtue is at the fainting-point, when it would be so easy to drop all and give up all; when, if you do not, you make yourself a power.—J. F. W. Ware.

....Seen from outside, many forms of human life seem coarse, repulsive and unbearable, which, seen from the inside, seem tolerable and pleasant.—Christian Register.

....Tomorrow! How often we say that when a resolution is taken or a purpose designed, and how mockingly Fate laughs back at us. Tomorrow! as if time in our poor mortal hands, or as if, to the cowardly, there ever is a tomorrow!

....What a vast proportion of our lives is spent in anxious and useless forebodings concerning the future—either our own or those of our dear ones. Present joys, pleasures, blessings, and we miss half their flavor, and all for want of faith in Him who provides for the truest interest in the sunbeam. Oh, when shall we learn the sweet trust in God that children tell us every day by their confident faith and cheer. Who are so mutable, so faulty, so irritable, so unjust, and He, who is so watchful, so pitiful, so loving, so forgiving? Why cannot we, slipping our hand into His each day, walk trustfully over that day's appointed path, with the surety of His love, straight, knowing that evening will bring us sleep, peace and home?—Phillips Brooks.

....Sometimes there comes an hour of calm. Grief turns to blessing, pain to blessing. A Sower that sows the seed of sorrow, still sows the seed of gladness, upward still. And then my heart attains to this—To thank thee for the things I miss.—T. W. Higginson.

....Emerson says, "Thought ministers of justice and power, fair justice and power fall never." That is to say, thought is to interpret justice and power, to define the truth, may fall in their interpretations, err in their definitions; yet justice, power and truth, the eternal trinity of God, fall never. They remain the same yesterday, today and forever. Hope is strength for many days.—W. D. Little.

....Open thy mouth, judge righteously and plead the cause of the poor and needy.The sweetest season of all the year,Is the time when the swallows and spring are here.

....And the heart's-ease blossoms for heart's light. Burst forth from green to white.A noble and attractive every-day life comes of goodness, sincerity, of religion, and these are bred in years, not months. Bishop T. D. Huntington.

....He only really lives whose interests are not in surface, who has gone up into the heights and down into the depths, who has been in union with the great heart of humanity, who weeps for the world's pain, and whose love, who has tasted the fullness of life, who has lived with mighty love, who has been burned with divine inspiration, who has been nothing of life can only end in darkness and in ineffable distress.—Parker.

....The Holy Supper is kept indeed, In what we share with another's bread. Not what we give, but what we share. For the gift without the giver is bare. Who gives himself, with his whole self—His heart, his strength, his love, his soul—Gives himself, his hungering neighbor and himself.

....There are no failures in life. From the point of view of the world, it is true, some of the greatest successes are counted failures. From the point of view of Heaven, some of the greatest failures are counted successes. Strictly speaking, from the point of view of God, there are no failures. We are living souls the measure of our sowing. Let us ask. We are the spiritual offspring of our dream.—Hugh Black.

Removed Honey Growth of Three Years Standing. CARROLL, ME., Jan. 22, 1903. The Lawrence-Williams Company, Cleveland, O.: I used one bottle of your Gombault's Castile Balsam on two bone bunches on horses' heads three years standing. It removed them both. I consider it one of the best things on the market for man and beast. C. W. DANFORTH.

Dairy Products Steady.

The situation shows but few changes since last noted. Quotations average about as then recorded, a few fractional changes downward being nearly balanced by slightly firmer prices for other grades. Receipts of fresh made begin to show some increase, and the time of year is approaching when the output of creamery should be considerably larger. But as yet the supply is light, and the demand goes a little better perhaps than prevailed last week. In Boston the top price for large lots is 27 cents, and this is for a grade reached by only a small proportion of the receipts. The bulk of sales are made at 26 to 25 cents or lower. The supply of second grades is liberal, and these are not in great demand. Much of the storage stock now remaining is not of the very highest grade, and will not bring over 23 cents. Dairy lots showing new milk flavor sell at 25 to 25 cents. Export grades are not selling freely, the prices not being low enough to tempt shippers. Now and then a lot is picked for this purpose at 14 to 16 cents. Foreign markets are reported unchanged for export grades, and some American butter could, no doubt, be taken care of if the price were a little lower.

Prices at New York have ranged somewhat between the Boston level, best creamery being reported at 25 cents, and even a fraction higher for a few fancy lots. Grades below the highest are not in special demand. The best cold storage now in stock brings 24 cents, but most of it rules lower on account of inferior quality. It is complained that much of the new creamery from northern New York is coming too heavily salted. The supply of Western creamery is somewhat limited by the condition of roads, which hinder the delivery of milk and cream at the factories. It is believed that these conditions will improve within a fortnight, and that the supply from Western sources will be plenty, and most of it so poor that nobody cares to buy it.

Cheese holds as firm in price as ever, with the supply light on all grades. Now and then sales of best grades are reported at a little above even the top quotation of 14 cents. Under grades bring full quotations. At New York the market shows no special features, demand being moderate and fairly satisfactory. Full quotations being maintained. Exporters are willing to buy when ever suitable lots can be had, but holders are unwilling to encourage sales by making concessions. Winter-made cheese shows considerable variation in quality. Skims are in rather scanty supply and very firmly held. During the week from 1200 to 1500 boxes, mostly at 14 cents, have gone to exporters, and the amount actually sent abroad for the week was 2389 boxes.

Some interest has been excited among the dealers by the new Western idea of making cheese in prints like butter. "More consideration in this direction seems to have been given in the past to butter than to cheese, and, excepting some high-priced small packages and jars, cheese is still generally made in large sizes, which are cut into awkward slices at grocery stores and sold by the pound.

"One of the most popular butter packages is the one-pound print. In some markets print butter is quoted at one cent or more above the ruling price of other butter, which may be of the same quality, but is put up in a less attractive package. This popularity of print butter shows that it is profitable to study the market demands regarding the shape and the appearance of dairy products, as well as their flavor, texture and other qualities.

"On account of the demand for print butter, the manufacturers and dealers in dairy supplies have designed a number of machines and appliances for economically moulding the butter into print forms. These machines vary somewhat in their construction and manipulation, but they all make the one-pound print of about the same dimensions—2½ by 2½ by 4½ inches. In some printers a carved board is placed on one side of the mould into which the butter is pressed and this makes an impression in each print of some design or letter which has been selected as a brand or trade-mark by the manufacturer. So much attention has been given to the subject of butter printing that the details are now satisfactorily worked out.

"The favorable reputation which print butter has attained suggested the possibility of applying the idea to the manufacture of cheese. Why cannot cheese, as well as butter, be moulded into one-pound prints? After studying this question for two years, it is possible to say that this new form of cheese can be made, and that it is received with much favor by the consumer. The first print cheese was made at the Wisconsin Dairy School during the winter of 1898-99. Since that time some of the details have been changed, but the general plan of the operation is the same as originally carried out. In so far as the cheese is concerned, no deviation has been made from the usual process of making cheddar cheese, except a modification in the pressing and the 'follower' used in the press.

None of the cheese seems yet to have reached the Eastern markets, and dealers appear somewhat doubtful of its reception, unless it be used to set a special quality of cheese.

Receipts at Boston for the week [54,740 pounds butter, 2037 boxes cheese, besides 277 boxes for export, and 58,571 cases eggs, compared with 656,938 pounds butter, 2100 boxes cheese, besides 5536 boxes for export, and 39,204 cases of eggs during the same week of last year. Receipts for the month of April were 2,315,200 pounds butter, 8801 boxes cheese, besides 11,543 boxes for export, and 115,911 cases of eggs. Compared with receipts during April, 1902, of 2,316,742 pounds butter, 8229 boxes cheese, besides 40,001 boxes for export, and 100,667 cases of eggs.

Receipts at New York for the week 31,320 packages butter, 12,250 packages cheese, 136,500 cases eggs, compared with 29,098 packages butter, 12,157 packages cheese and 115,419 cases eggs for the corresponding week of last year.

New Sugar Scarce and High.

Considerable new sugar is on the market, but the high prices show its scarcity, small cakes being 14 to 20 cents a pound, and bricks sell at 12 to 15 cents. The best syrup is quoted at \$1 to \$1.25 per gallon.

The sugar orchards have now been tapped for over two weeks, the tapping having been done earlier than for several seasons on account of the early spring, but thus far only two good runs of sap have been secured. In order to have good runs of sap there must be frosty nights and warm days, and there has been very little of this kind of weather. The days have been warm enough, but the frosty nights have been lacking. But the trees have begun to bud, and the farmers say that even if the weather should change and good runs of sap be secured, the

quality of the sugar would be decidedly inferior, because of the trees having budded. Many of the sugar-makers had made contracts, before the season began, to supply firms in the cities with large quantities of sugar, and to fulfill these contracts to the letter would be a practical impossibility. Some sugar-makers have given up hopes and are putting away their apparatus.

Patriotic Memories.

Something About the Stamp Act and the Boston Massacre.

BY BENJAMIN F. STEVENS.

After the capture of Canada by the British from the French in 1763, sixteen years prior to the Declaration of Independence, almost every act of Parliament was framed on the sole idea of coercing the trade of the colonies toward Great Britain, whereby the mercantile community were in a constant state of trouble, a memorable source of which was the passage of what was called the "Acts of Trade," when fifty-eight of the best-known merchants of Boston memorialized in General Court in opposition to the powers of the Crown and asked that no "Writ of Assistance" be granted by which the Custom House officers could put in force those acts. The question was carried to the Supreme Court and James Otis, Jr., then occupying the office of advocate-general in the Court of Admiralty, resigned his office under the Crown and espoused the cause of the merchants to resist the Custom House authorities, and thus he began his career as a patriot. History tells us that "he burst forth as with a flame of fire in the force of his language," and seemed to indicate that the principles of freedom and independence were not to be controlled by kingly power; "that taxation without representation was tyranny," and if the colonies were not to be represented in Parliament they would not bear any of the expenses thereof. Notwithstanding the ability of Otis, the Supreme Court decided in favor of the pretensions of the Crown and officers of the customs.

James Otis, the patriot, was born in Barnstable in 1725, graduated at Harvard, and was ever an eloquent, energetic and uncompromising advocate of the liberties of the colonies as against the harsh treatment of the Mother Country. His great speech in 1761 against the Writ of Assistance has been described by John Adams, then in his twenty-sixth year, in language which is or should be familiar to every schoolboy in the land. So great was the animosity of the British against him that he was cowardly assaulted to such a degree that his reason and faculties were injured for life. He was killed in 1783 by a flash of lightning while standing in a doorway in Andover, that year in which Great Britain acknowledged American independence, which he had done so much to secure. Probably no other one of the shining galaxy of patriotic men of Colonial times had the strength with the people that this great man had until his career was cut short by the myriads of the Crown. What he would have accomplished had his faculties been preserved to him must be left to the imagination, but so highly was he thought of as a man, so patriotic, so courteous was he, it would seem he must have had the highest place in the hearts of his countrymen.

In 1765 King George III. signed the Stamp Act, which levied a duty or tax of half a penny to twenty shillings on every piece of parchment or paper on which anything should be written or printed. The colonists through the length and breadth of the land were aroused to indignation; riots ensued, and in Boston, Andrew Oliver, the secretary of the province, who was appointed distributor of the stamps, was hung in effigy, and a boot (Lord Bute) with a devil peeping out of it with the Stamp Act in his hand, was found suspended on Liberty Tree, opposite where the Boylston market formerly stood. All business was laid aside for the day, the people could not be appeased and they proceeded in a large body to Kilby street to a building supposed to be intended by Oliver for his stamp office, and demolished it in the twinkling of an eye, bearing aloft a portion of the ruins to Fort Hill, where they made a bonfire of it in full view of Oliver's house, whereupon Brother Oliver, being somewhat frightened, declared he would not directly or indirectly introduce any of the King's stamps into the market. And so the colonists won, the odious law being, by a change in the ministry, repealed. This was the first gun of the Revolution.

It may be of interest to our readers to know, if they are not already aware of the fact, that the famous "Sons of Liberty," applied to those colonists who believed that taxation without representation was a bitter wrong, originated with Col. Isaac Barre, a British soldier and statesman, who was the intimate friend of, and fought with, General Wolfe when the latter defeated Montcalm on the Heights of Abraham, before Quebec. Barre occupies a prominent position in Benjamin West's famous painting of the "Death of Wolfe." After recovering from the wounds received in that battle, which General Wolfe was killed, he entered Parliament, and through the entire ministry of Lord North stood the firm friend of the colonists. The generous spirit of Colonel Barre shone conspicuously in his reply to Charles Townsend, who held that the colonies had been planted "by our care, nourished by our indulgence and protected by our arms," to which the friend of the colonies replied, "Remember this day I tell you, the spirit of freedom which has ever actuated the people will accompany them still. The people, I believe, are as truly loyal as any subjects of the King; but a people jealous of their liberties and who will vindicate them if ever they should be violated." Later on Colonel Barre predicted that the course of the British ministry would lose the colonies to the Crown, which it did, and thus the most precious possessions of Great Britain passed into an independent nation.

Passing over considerable history running through a period of five years subsequent to the Stamp Act, which is exceedingly interesting but too long to be quoted here, we come down to the year 1770, when another British aggression was forced upon the Boston people, giving rise to one of the most dramatic events in Colonial history, the "Boston Massacre," about which we have all read so much, and have learned to look upon with so much awe and respect. The feelings of the colonists, it must be understood, were constantly being fomented by duties laid by Parliament upon articles of British manufacture, such as glass and colors and even tea, the product of the East, was included, the ministry claiming that these taxes were for the support of the colonies by granting salaries to the governors and judges, and for appointing a permanent administration of the customs the colonies having little or nothing to do with their own government. But the cry of "No tax without representation," originally raised by James Otis years before, had not been forgotten; and

whereupon the people of Boston resolved to encourage the use and consumption of all articles raised or made in the colonies, and not to purchase any of the enumerated articles imported from abroad. For instance, at funerals not to use any gloves but of Colonial manufacture, or purchase any new article for such an occasion but those absolutely necessary. And so the bitterness toward the Mother Country grew, until, in an evil hour, the lad Christopher Sailer, who may be said to have been the first victim of Royalist misrule, was killed by an informer, one Richardson. This little boy was buried from his father's house on Boylston street, the remains being preceded by five hundred schoolboys, and the pall supported by six of his playmates, followed by thirteen hundred citizens on foot, the procession closing with a multitude of vehicles.

But "the handwriting on the wall" could not, or would not, be expounded by the British ministry, who began, in utter ignorance of the popular feeling against tyranny and subjection, to draft or quarter regiments of soldiers upon the people of Boston, as well as to fill its harbor with men-of-war. A detachment of the Fifty-ninth Regiment and a train of artillery with two guns, landed on Long wharf and marched up King (now State) street, each soldier having sixteen rounds of powder and shot. Another regiment marched to Brattle street, where the old City Hotel formerly stood; and another had quarters in Water and Congress streets. Sailors and laborers were afraid of being impressed, and every act of the Colonial government not only had the appearance of, but was coercion. The people, who had since Otis' time been fretful and, almost ready to grapple with the constituted authorities, were now loud in their denunciations of this last unwarrantable act of oppression. They, although not born to the purple, were just such men as kings were made of,—aye, better by far than the imbecile head who adorned the British government, an obstinate, bull-headed bigwig, who allowed his precious colonies, the best part of his possessions, to slip through his fingers, never to be regained (for which see Thackeray's "History of the Four Georges"). Why, there seemed to be a curse even upon those thought to be sensible Englishmen; even Dr. Johnson himself, one of the greatest of minds, wrote such silly pamphlets about the colonies and their adherence to the Crown that one wonders at his want of knowledge of men of the day. The people of the colonies and their cause were not understood, and the people never have been understood when the murmur is heard which always goes before a storm.

And so the British troops occupied the streets of Boston. Let us turn to the Boston Gazette of March 12, 1770, seven days after the troops fired upon the multitude in King street. The paper is surrounded with a black border, and, besides a most interesting account of the tragedy, contains the representation of four coffins, each with a name and cross above it, S. G. (Samuel Gray), another S. M. (Samuel Maverick), a third J. C. (James Caldwell) and the fourth C. A. (Crispus Attucks). The last two were strangers, Attucks having been born in Framingham, and Caldwell apparently unknown. Maverick was a lad of seventeen years, while Gray was somewhat older. There were, besides, seven or more dangerously wounded. That the soldiers who fired upon the multitude may have had some provocation is not to be denied, but the provocation was not that there was danger in the air through the intervention of such men as James Otis, Thomas Cushing, John Hancock and Sam Adams. The whole affair was the sad result of quarreling troops among citizens in time of peace, under the pretence of supporting the laws and aiding civil authority. In reality these regiments were here to enforce oppressive measures and to awe and control the legislative and executive powers of the British government, to say nothing of endeavoring to quell the spirit of liberty. The patriots of that day, foremost among whom were those we have mentioned, were far-sighted men, who thought it their duty to try all means to avoid trouble, and they did try by all the representations in their power, but Gov. Francis Bernard and his coadjutors would not be convinced. The troops were allowed to remain, and the men-of-war stayed in the harbor until they had occasion to run down to Halifax for a new lot of red coats. The soldiers had had some trouble with the citizens on a prior occasion, but it was not until the evening of the fifth of March that what is now known as the "Boston Massacre" took place. On that evening several soldiers of the Twenty-ninth Regiment paraded the streets with drawn cutlasses and bayonets, abusing and wounding numbers of the inhabitants. About nine o'clock, four youths, perhaps from sixteen to twenty years old, were passing a narrow alley leading into Brattle street, they saw a soldier brandishing a broad sword against the walls, out of

which he struck fire plentifully. One of the lads admonished one of the others to look out for the sword, whereupon the soldier turned about and struck him with it over the arm, and dashed at another, piercing his clothes and grazing the skin. One of the youths then struck the soldier with a short stick, and soon the noise brought soldiers and citizens together, and there was a general fight, no one being, however, much hurt. Then the soldiers, with the citizens, who had gathered without the slightest intention of engaging in a riot, turned down Cornhill into King street, when they met Captain Preston with a party of men with charged bayonets, who had come (probably upon hearing the noise) from the commission-house. They took their stand by the Custom House, which was then where the Merchants Bank is now, and began to drive the people away, whereupon it is said that some threw snowballs at the soldiers. It is very likely they did, if, as we have reason to believe, there were lads among them. Upon another volley of snowballs being thrown, the order was given to fire, and about eleven guns were discharged, and the dead and wounded lay in a heap. The old engraving by Paul Revere doubtless gives a very accurate description of the locality, the buildings, and, in fact, the whole scene as it occurred on that night.

The news of the "massacre," as it was called, spread like wild fire; the bells were rung, and a vast multitude assembled at the place of the tragedy scene. While some took care of the dead and wounded, the rest were in consultation; but so little intimidated were they that, when the Twenty-ninth Regiment marched up King street, these patriots kept their station. As expressed by an officer, "They were ready to run upon the very muzzles of our muskets." The authorities at once went into the Town House, where a considerable body of the people appeared and expressed themselves with a freedom and warmth becoming the occasion. The people insisted to the lieutenant-governor that the regiment under arms should be ordered to the barracks, to prevent further bloodshed, which was done. Captain Preston and the soldiers who were known to have fired were committed to jail. They were tried in the following October, and defended by those eminent patriots, John Adams and Josiah Quincy, and all but two were acquitted. These two were convicted of manslaughter, branded, and sent to Castle Island. From 1770 to 1783, inclusive, the day was celebrated by an oration, tolling the bells, etc.

The occasion of the funeral of the victims of this massacre—Samuel Gray, Samuel Maverick, "the only son of his mother, and she a widow," James Caldwell and Crispus Attucks—is said to have been a most solemn occasion. All the shops in town were closed, and all the bells in the city, as well as those in Charlestown, Roxbury, Dorchester, etc., tolled a solemn peal. The procession began to move between four and five in the afternoon. The two strangers, Caldwell and Attucks, were borne from Faneuil Hall attended by a numerous train, and the other two, Gray and Maverick, one from the house of his brother, Benjamin Gray, on the north side of the Exchange, and the other from the house of his widowed mother on Union street. The several hearses formed a union on King street, where the dreadful tragedy had occurred, whence they were preceded by an immense throng of people, not only from the city, but from the neighboring towns, in ranks of six, and followed by a long train of carriages. The bodies were deposited in one vault in the Middle Burying Ground, now the Granary, opposite Bromfield street, in Tremont street, where the remains now rest.

May it be a long time before the event of "The Boston Massacre" is banished from the mind of the patriotic youth of our country.

Literature.

Mrs. Humphrey Ward presents in her latest book, "Lady Rose's Daughter," an old, yet ever formidable truth, namely, that the sins of the fathers are visited upon the children. The story opens with the introduction of Miss Le Breton, who is the illegitimate daughter of Lady Rose, who forsook her position in one of the fine old English families of rank, and left her husband for a wandering Bohemian artist, who loved independence above all else. Mrs. Ward tells us that these two live happily in poverty and worldly disgrace, bringing into the world a daughter, who, orphaned at an early age, is left to battle for herself. This girl, having taken the name of Miss Le Breton, secures a position as a companion to Lady Somerset, and at her salon meets and comes to know many of her relatives. We are told that this Miss Le Breton feels no shame at the position her parents took; instead she possesses the instinct of intrigue to such a degree that she becomes a vulgar schemer for her own advancement and also that of her lover.

It is because of the latter, a sort of worthless fellow, who is willing, because of money, to accept a position in the world from a woman when he is engaged to another, that is the undoing of Miss Le Breton. It nearly results in her dishonor, but she is saved by the true, generous love of an honest gentleman who in time wins her love and herself. The fine work in the novel is the skill exhibited by Mrs. Ward in the development of her heroine, from a haughty, intriguing, selfish girl, to a broken, humble woman, rising through the help of the great love of the man who saves her, first from dishonor and secondly from herself. Her character is difficult to understand. One must remember her parents and their dispositions, which could allow them to do and live as they did without remorse. Although the author leans to the safer side, that of conventionality and law, yet she does not preach against Lady Rose's act or condemn it. It is rather presented to us as if it were best not to ignore society's and religion's laws, but that love is unswerving,—it is right when it is true. Some such teaching is set forth in Gertrude Atherton's "Senator North," where a girl loves a married man who secretly courts her, and is delighted when his wife's death sets him free to marry, although hitherto the respect of his sons and society at large holds him back. Such situations exist as we all know, but it were as well if the novelist did not use them in such favorable lights. One likes better the somewhat stern teachings of self-renunciation, duty and right. "Lady Rose's Daughter" is free from that hysterical emotion which marred "Eleanor," although some scenes savor of sensationalism. But, on the whole, the author has shown her power of psychological insight and her ability to express convincingly the struggles of a human soul. She shows each character true to its own peculiar traits, and never does she forget to exhibit each in its entire personality. Sir Wilfrid in his role of general confidant and disinterested critic, Lady Henry in all her bitter-tempered household tyranny, the child-like ducness with all her foolish yet unselfish devotion to Miss Le Breton and the two lovers, are all comprehensible and human; they are real, living, breathing people, to whom temptation is common. The book is a departure from Mrs. Ward's usual style which characterizes "David Grieve" and "Robert Elsmere," two preaching novels. In "Lady Rose's Daughter" she does not sermonize at all, and although she has been accused of not inventing the main theme of her plot, yet one can but feel whatever has been taken from her has been thoroughly made the author's own, and that from the general storehouse of all literature, Mrs. Ward has not overstepped her rights. The book captures the interest at once and holds it to the end. The conclusion does not seem like a natural finish to a story, but rather the fortunes of the heroine are followed so far, then let drop. "Lady Rose's Daughter" invites a sequel, as one feels that in such a position as she has long coveted, Miss Le Breton would develop some interesting situations. (New York: Harper & Brothers. Price, \$1.50.)

A volume of verse by Lucia Gray Swett bearing the title "Sisters of Reparatrice," will make a most acceptable Easter offering. The opening poem, from which the book takes its name, describes the life of a sisterhood in Genoa which, Donadio, a celebrated prima donna, joined many years ago. Her singing for awhile attracted great crowds to the chapel of the convent, but was discontinued because of those eminent patriots, John Adams and Josiah Quincy, and all but two were acquitted. These two were convicted of manslaughter, branded, and sent to Castle Island. From 1770 to 1783, inclusive, the day was celebrated by an oration, tolling the bells, etc.

One among the many voices, Sweeter, higher yet would soar. And we said, "It is Donadio, Hark, she sings as ne'er before."

Yes, it was the Donadio, Often had we heard her name; How she turned from many a triumph, Left applause, success and fame, All the glamour of the footlights, Dazzling stage and brilliant halls, For the shadow and the silence Of the sombre convent walls.

Some of the other poems in the volume have a quaint, old-fashioned air that makes them pleasant pictures of a time when existence was less strenuous than it is today and when manners were courtly and picturesque. One, "The Old Brocade," takes us back to the ball given in Salem for General Washington in 1789. Another says of "The Girl of Other Days":

How often I have watched her stand, Upon a Sabbath morn, Her hymn-book in her little hand, Her pretty gown of lawn.

The neatly folded India shawl, The bonnet edged with lace,— A something sacred over all Reflected in her face!

"Our Cups of Tea" is a pleasant anticipation of a refined and quiet old age: We'll dress in gowns of silver gray, With knots of ribbon, oh, so gay! Of pink and blue in caps of lace, Or curls that nod about each face; Our muslin kerchiefs wondrous fine, With pins and pearls in quaint design, And bright old ladies we will be, And gossip o'er our cups of tea.

The other poems in the volume show a delicate fancy, and their thoughts are simply and melodiously expressed. Here is a little bit that will soon be seasonable: Joyous children with glad voices As they carol sing today, Seem to hear the angel's anthem, Almost see the golden way.

But for souls with sorrow laden, There's a song no glad heart hears, Easter's blest, most wondrous glory Shine for eyes that look through tears.

The book will please all who wish to escape a while from the turmoil of the world. It is both restful and inspiring. (Boston: Lee & Shepard. Price, 80 cents net.)

Glenwood Ranges

Make Cooking Easy

Leading Dealers sell them everywhere as the standard range.

Popular Science.

—The milky sea, as it is known to mariners, is not yet fully understood. It seems to be common in the tropical waters of the Indian ocean, and is described as weird, ghastly and awe-inspiring, and as giving the observer on shipboard the sensation of passing through a sort of luminous fog in which sea and sky seemed to join and all sense of distance is lost. The phenomenon is probably due to some form of phosphorescence.

—From seven diamonds—weighing from two to twenty-one carats—that have been picked up in Wisconsin and adjoining States, Prof. William H. Hobbs traces the diamond fields of North America to the volcanic region of the Canadian wilderness, south of Hudson bay. The only known matrix of the diamond is the black shale—or "blue ground"—around the necks of burned out volcanoes. The loose stones found seem to have been transported by glaciers, and on following up the probable courses of these ancient ice rivers the lines converge in the barren territory states.

—Excessive muscular development is pronounced by an experienced physician to be not only unnecessary, but positively dangerous. On ceasing athletic training, which every person must do sooner or later, the system adapts itself very slowly to new conditions, and digestive and liver troubles are very liable to follow. The great lungs, not needed in sedentary work, degenerate, often leading to consumption.

The late surveys of the English coast show a loss of land of forty thousand acres since 1860, although in some places, as at New Romney, the solid ground has been pushed out two miles or more in the sea. By his method of feeding through the stems instead of the roots, S. A. Mokshetzki, the Russian entomologist, believes that trees and plants can be cured of disease and greatly stimulated in growth. His special apparatus is intended to introduce salts of iron—either solid or in solution—into apple and pear trees, and he has used it for applying chemical treatment to eight hundred fruit trees on the southern shore of the Crimea. The weak and diseased condition of the trees was remedied, while an unusual development followed. An important new field seems to be opened up, and the possible effects of varied dietary, administered to different plants in this way, remain to be shown.

Gems of Thought.

... Eternal life is not a thing that we are to get when we die. It is a thing that we are living now.—Drummond.

... The true moment at which to call upon one's self to take any new step in virtue is at the faintest point, when it would seem easy to drop all and give all up; when, if you do, you make yourself a power.—J. F. W. Ware.

... Seen from outside, many forms of human life seem coarse, repulsive and unbearable, which, seen from the inside, seem tolerable and pleasant.—Christian Register.

... Tomorrow! How often we say that when a resolution is taken or a purpose designed, and how mockingly Fate laughs back at us. Tomorrow as if time were an ocean, and we were to be opened up, and the possible effects of varied dietary, administered to different plants in this way, remain to be shown.

... What a vast proportion of our lives is spent in anxious and useless forebodings concerning the future—either our own or those of our dear ones. Present joys, present blessings slip by and we miss half their flavor, and all for want of faith in him who provides for the tiniest insect in the sunbeam. Oh, when shall we learn the sweet trust in God that our little children tell us every day by their confident faith in us? We, who are so mutable, so faulty, so irritable, so unjust, and He, who is so watchful, so pitiful, so loving, so forgiving? Why cannot we, slipping our hand into His each day, walk trustfully over that day's appointed path, then or there, as He will, straight, knowing that evening will bring us sleep, peace and home?—Phillips Brooks.

... Sometimes there comes an hour of calm; Grief turns to blessing, pain to balm; A sorrow that we cannot understand, Still leads me onward, upward, and still; And then my heart attains to this: To thank thee for the things I miss.

—T. W. Higginson.

... Emerson says, "Through ministers of justice and power, yet justice and power fall never." That is to say, these things slip by and we miss half their flavor, and all for want of faith in him who provides for the tiniest insect in the sunbeam. Oh, when shall we learn the sweet trust in God that our little children tell us every day by their confident faith in us? We, who are so mutable, so faulty, so irritable, so unjust, and He, who is so watchful, so pitiful, so loving, so forgiving? Why cannot we, slipping our hand into His each day, walk trustfully over that day's appointed path, then or there, as He will, straight, knowing that evening will bring us sleep, peace and home?—Phillips Brooks.

... Open thy mouth, judge righteously, and plead the cause of the poor and needy.

... The sweetest season of all the year, Is the time when the swallows and spring are here.

And the heart's ease blossoms for hearts that are light, Burst forth from green to white.

... A noble and exalted every-day being comes of goodness, of sincerity, of refinement, and these are bred in years, not moments.—Bishop T. D. Huntington.

... He only really lives whose interests go down to the surface, who has gone up into the heights and down into the depths, whose life beats in unison with the great heart of humanity, who weeps for the world's pain, and suffers for its sins, who has tasted the fullness of unselfish love, who has swelled with mighty hopes, who has burned with divine inspiration.—J. F. W. Ware.

... The know-nothing, the do-nothing abject, the scheme of life can only end in gloom and darkness and in ineffable distress.—Joseph Parker.

... The Holy Supper is kept in order, In what we share with another's need, Not what we give, but what we share; For the gift without the giver is bare; Who gives himself, with his alms feeds himself, His hungering neighbor and his need.

... There are no failures in life. From the point of view of the world, it is true, some of the greatest successes are counted failures, and the greatest failures are counted successes, strictly speaking, from the point of view of the heart, it there are no failures. We are living souls the measure of our sorrow. We are what we ask. We are the spiritual offspring of our dream.—Hugh Black.

Removed Honey Growth of Three Years Standing.

CARROLL, MR., Jan. 22, 1903. The Lawrence-Williams Company, Cleveland, O. I used one bottle of your Gombault's Compound Balsam on two bone bunsches on horses, one of three years standing. It removed them both. I consider it one of the best things on the market for man and beast.

C. W. DANFORTH.

Poultry.

Turkeys at Nesting Time.

The highest ambition of a turkey hen is to sit on her eggs, and she will do it no matter how cold it is. To be successful in managing her, she must be quiet and gentle, and she must think you are her best friend. She must be in her natural propensities all you can.

If confined at all during nesting time, let her be in a large yard enclosed by a high fence of poultry netting, where piles of brush and other things are placed, and she will be as happy as if by chance. There they will come to make their nests, and, thinking you have concealed them and outwitted them, they are just as happy as if they had.

Later on, large, well-ventilated coops, in which a few handfuls of grass or leaves are placed, half concealing a nest egg, are generally accepted; and these coops are the very thing for her to sit in and afterward to afford shelter for her and her little ones.

If the hens are driven in this yard every morning and there find food and water, they will generally be contented and come to know you of the nest provided, though sometimes one possessed with a wandering mind will persist in getting out and in seeking a nesting place in some distant woodland or grassy fenow. In this case it is well to provide a rough house in which a few nests are made, and confine them in this until noon. I have had them become so attached to such a house that the hens would return to it of their own accord to lay after I had turned them out. Do not adopt the practice of some lazy people I know of who coop their hens from early morning till sundown, and then complain that the eggs they get are few in number and a large per cent. infertile. Laying hens should have free range all day of every day at least, in order to gather for themselves the material for making perfect eggs, which we in our ignorance have failed to supply.

Eggs should be gathered daily and placed in a box lined with something soft, turning them gently every day and keeping each sitting to itself. Nests for the sitting hens are best made on the ground, a place being hollowed out for the purpose, only deep enough to keep the eggs in place, and lined with a handful of soft grass. The hens should be set either in a large coop or pen, where they will be protected from rain and hot sun and safe at night from robbers. Lift them gently from the nest every day and place them in sight of food and water, permit them also to indulge in a dust bath or a short run, if they like, before returning to their nest. One person only should go near the sitting hens, treating them with the utmost gentleness, so that by hatching time all fear of approach has disappeared and the anxious mother will permit the removal of the young poulters without protest.

If there are as many as six hens in the flock, let the first two sit that show a desire to do so—the fresher the eggs the better the hatch. After giving the two turkey hens all the eggs they can conveniently cover, set the remaining eggs under reliable chicken hens, giving all the poulters hatched to the turkey hens. Thus, the first and largest brood will come out in May, at which time the poulters will be healthy and strong, and make rapid and vigorous growth.

The remaining hens, if not allowed to sit, will soon begin laying again, and although this second lot of eggs is not so large as the first, yet with good care another brood will come off before the middle of June, and can be brought to fair weight by Christmas. Let turkey hens raise their young, by all means. They will take them far ahead, give them fresh air, exercise, insects and green food, without which they cannot thrive.

A FARMER'S DAUGHTER.

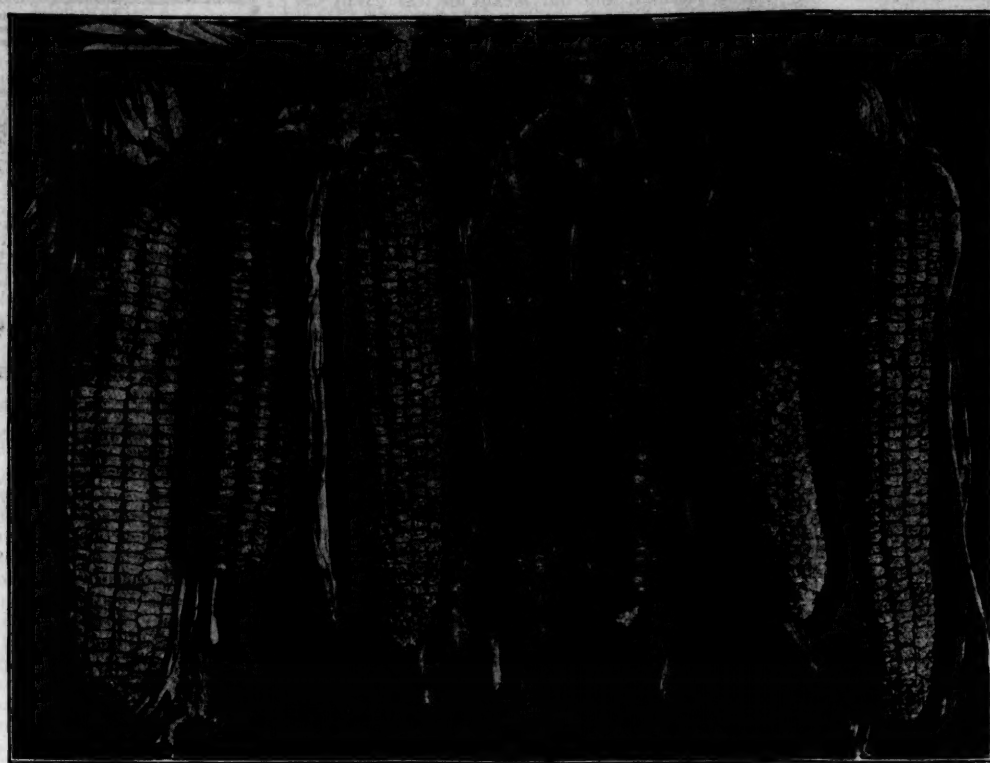
Practical Poultry Points.

A low fence may be made proof against flighty breeds of poultry by lengthening the posts with two eighteen-inch strips of wood fastened to each other at right angles, pointing over the yard, and attaching two wires. The hen is thus caught and thrown back before she reaches the top of the fence.

A Pennsylvania chicken man, G. Hirsch, has a plan for raising his own supply of fresh poultry meat, which he finds quite successful, and favors us with a brief description: "I take about ten pounds of cottonseed meal, thoroughly wet it and put it in a ridge, about four feet long, in the back of the lot in my chickens' yard. I cover this up with a couple of boards, so that the chicks cannot scratch it. In from three to five days this is full of maggots. I gradually uncover it, and in a few days the whole lot is gone, and all my neighbors say my chicks grow faster than any they ever saw."

Small, separate brooder houses seem to be most in favor on poultry farms. They are cheap, simple and work well in connecting with the range for the chicks. The W. H. Rudd (Orrocco) farm, not far from Boston, is sprinkled all over at this season with these little houses, each one equipped with a home-made lamp brooder. Writes Mr. Rudd: "We use some twenty-five small brooder houses, six feet square, five feet high, with a three-foot rear, and a brooder in front house. These are used in the early and late spring to raise our stock intended for breeders another season. The houses are so scattered that after our portable yards are taken away and the chicks allowed free range, they keep to their own little houses and the different broods mix very little. This mixing we have found a great trouble in sectional brooder houses where, having only five brooders to a house, when chicks are here grown into one room, and at night crowd into one room, and the attendant will be obliged to sort them out to keep them from crowding to death. It is also poor plan to have such a large flock mixed together. As a result partly of the wide size given throughout the growing period, the stock retains its full vigor after many years exclusive use of incubators and brooder houses, and is supposed by some to have a tendency to increase in vitality."

W. A. F. Hunter, now in the West, was consulting his successful little egg ranch at Natick, Mass., he placed considerable stress upon the varied and quite well-balanced ration he certainly gave him a large egg yield. He fed to his early selected, well-mixed pullets. Said Mr. Hunter: "Five months in the week we feed a mash made up of about a third cooked vegetables, such as turnips, or cut over cooked by being boiled in a boiling heat in water, an equal amount of salt to a bucketful; a heaping teaspoonful of cayenne pepper one day, ginger one day, then powdered charcoal one, and into this is stirred mixed meal until the mash is as stiff as a strong arm can make it. This mixed meal with us consists of one part of meal, one part of corn meal, one part of bran, ground oats, and the mixed meal, a scoop or dipper of each being mixed in turn into a bag, and poured from the bag



Hickox Improved. First Crop. Potter's Excelsior. Crosby. Cory. Bannan. Stowell's Evergreen.

into the meal barrel from which it is dipped into the mash. We consider the thorough mixing of these meals a considerable factor in making a good mash."

When wiring a poultry yard it is best to make it tight for small chickens. Wide boards at the bottom is the best plan, if not too costly. Old barn siding, well white-washed, will last a long time for such use. Fit the board close to the ground and fill chinks with sods on the outside. Posts should be about eight feet apart and netting four feet wide. Have an assistant, and after unrolling the netting flat along the ground, raise it to the right height and staple it at the top to the post at one end of the line. Let the assistant keep the netting tight, then staple the top selvage right around the line, letting the bottom hang. Then begin again drawing the bottom down and stapling it all around. The plan, carefully followed, avoids the bulges and warps so often seen.

Ground grain is more profitable than whole grain for poultry. This is the result of a year's work at the New York Experiment Station. Chicks were kept under conditions as uniform as possible from birth until nearly a year old, one lot being fed rations composed of the ordinary whole grains, and the other lot rations of ground grain. The ground grain ration proved considerably more profitable than the whole grain ration with the growing chicks, and the same was true of capons of equal weight from these chicks and from others of equal weight and age fed alike before caponizing. The difference was hardly enough to warrant a farmer going to much bother or expense to grind grain for poultry, but where one has to buy poultry food the meal form will usually be the cheaper.

Poultry in Short Supply.

Dressed poultry is still in moderate supply, and prices for good stock have advanced slightly. Quotations for turkeys, capons and ducks are unchanged. A few spring ducks are on the market. Squabs are more abundant and lower. Live poultry continues scarce, and best lots bring 14 cents. At New York the market was almost bare of live poultry at the opening of the week, and desirable shipments brought as high as 15 cents, these being fat hens. Roosters brought from 10¢ to 13 cents, according to age and condition. Live turkeys and ducks also sold well.

The demand for cold-storage poultry depends considerably on the weather. A large portion goes to the summer-hotel trade. If the season is cold and wet, keeping pleasure seekers away from the seashore and mountains, the demand for this grade of poultry falls off very considerably. Last year, for instance, was a cool summer, and there was hardly any call for this grade from the resort-dependent upon to clean up the holdings. This year, so far, there has been no call for frozen poultry since the first of the year. Most of it was stored on a 19-cent market, and the prices for the season are such that it is thought that packers will lose money, even with a favorable trade for the summer. The situation is such that holders are figuring, not how much they can make, but how little they can lose. It takes a fancy lot to bring 20 or 21 cents, but the bulk of the holdings are such that these prices cannot be realized. Offers are made at 17 to 19 cents, the price having declined somewhat during March. One large sale is reported of very fancy young turkeys, sold for May delivery at 20 cents, in the New York market, but this price is exceptional. It is needless to say that at 17 to 19 cents, when expenses must be deducted, packers are losing money, but in the case of frozen fowls, conditions are not so bad, and dealers expect to get their money back in most cases. The demand for this class of poultry is improving on account of the scarcity of fresh stock.

Horticultural.

Apple Trade Slightly Improved.

Most dealers concede that the conditions are somewhat more favorable than when last reported. It cannot be said that the average range of prices is higher, but receipts are not quite so large and sales are more easily made. It appears that the worst period of the glut is over, and although no very favorable conditions of the market are expected, a small but steady improvement is looked for.

Y. K. Whitney says: "There is not so much cheap stuff coming in this week. First rate No. 1 Maine Baldwins bring \$2, some very fancy cold-storage lots sell at \$3. Most apples from nearby, including Massachusetts and New York State, do not bring above \$1.25 for the best. There is more call for Russets, and strictly No. 1 fruit brings \$2 per barrel. There is some demand from the South, but recent advances on freight rates by the Southern roads have increased the cost of shipments about one-third, and are likely to kill the Southern trade. A shipment of storage apples from New York brought \$2 per barrel here. All Baldwin receipts at this point are falling off, giving a chance for the sale of the stock in cold storage. This cold-storage stock is stored just as put into the cooler, without sorting, there being no shrinkage. This fruit keeps quite well after being taken

out this season, but later on will quickly soften."

A. W. Mead & Co. report the market rather unsettled for average grades of nearby apples. Apples from one carload of uniform quality sold at from \$1.15 to \$1.50 on the same day. They quote \$1.25 for Massachusetts Baldwins.

Sands, Furber & Co. report better demand for strictly No. 1 apples, this grade being more scarce than during the recent weeks. They quote sales of \$1.50 for No. 1 Baldwins and \$2 for northern Maine Baldwins, well colored, well packed and faced.

Exporters say foreign markets for all varieties, except long keepers like the Russet and the Ben Davis, will be about over after this week. The English markets continue in bad condition. One exporter reports the purchase of cold-storage Russets, etc., at \$1.25. He intends to ship this small lot of 12 barrels as an experiment, this being the smallest consignment that transportation companies will take at lowest freight rates. He does not consider the market favorable enough to warrant large shipments. Reports, however, are somewhat favorable for sound fruit, but the great bulk of arrivals are waxy and out of condition. A great many shipments at this season are made in cold storage, of which the charges, including freight, are \$1.50 to London, against 81 cents ordinary storage, and to Liverpool \$1, against 62 cents ordinary storage. Of course, this expense is only warranted by shipments of fruit good enough to bring full quotations. Latest quotations in Liverpool are 75 cents to \$1.75 per barrel, with a few at \$2.40. Russets \$1.50 to \$2.65. Expenses come out of these prices, which are, of course, unsatisfactory except for best lots.

Hay Trade Conditions.

The only marked change in the hay market since last described is that the line drawn between the upper and lower grades slightly. Quotations for turkeys, capons and ducks are unchanged. A few spring ducks are on the market. Squabs are more abundant and lower. Live poultry continues scarce, and best lots bring 14 cents. At New York the market was almost bare of live poultry at the opening of the week, and desirable shipments brought as high as 15 cents, these being fat hens. Roosters brought from 10¢ to 13 cents, according to age and condition. Live turkeys and ducks also sold well.

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Orange Markets.

The large markets of the country are supplied with oranges every day in the year, although in midsummer and autumn the supply is low. At that time the arrivals are from South America and New Zealand. Next comes the California crop, which arrives in August and September. The Cuban oranges have become a less important factor during recent years, the trees having become old and the fruit of inferior quality. About twenty thousand cases come from this source, also large numbers from Jamaica Island, the latter being more juicy in quality. California oranges are out of the market before September. Some excellent fruit has been shipped lately from Mexico, but these are not good keepers. Florida and California have the best staying qualities, and the late Florida oranges prolong the season until well into the summer. In the Northern markets the Italian oranges are rated as lowest grade, next the Spanish, then Havana, Porto Rico, Jamaica, with Florida and California rating first.

Vegetable Markets Quiet.

Dealers report trade rather slow. This is partly because of the warm weather, partly because of the season of Lent, and due also in some degree to the fact that this is the time of the year when the vegetable season is, so to speak, "between hay and grass." Old vegetables are pretty well played out, and nothing new is yet in the market except rhubarb and spinach. Of course there is always a supply of hothouse and Southern vegetables, but the great bulk of consumers cannot afford to use these freely, if at all.

The potato market holds steady at recent advances, but no changes in quotations have occurred during the week. Receipts are moderate and trade quiet. Bermudas are quite plenty, but their prices forbid general use. Sweet potatoes are beginning to be used more freely, the cost of sweets having approached more nearly to that of the white kinds.

Onions are as badly off as ever, the market being dull and weak. Said one dealer: "The trouble is there were too many onions and the growers didn't know it. They held their stock all winter for high prices and the slump came in spring. They made the same mistake as the apple growers." Old vegetables in general are rather hard to sell in all markets.

Chicago dealers allege a glut of turnips, beets, cabbages and parsnips, and report sales at prices hardly equal to shipping expenses. The situation in the East is not quite so bad, but the vegetables mentioned are certainly selling below a fair value. The trouble seems to be owing to the immense amount of Southern truck, North-eastern vegetables, long in storage and somewhat shrunken and inferior, are brought into competition with the new crop. This Southern competition is fast increasing, new regions being devoted to the business each year, and the result may permanently affect the late winter and spring market for Northern-stored vegetables.

Hothouse products hold about steady. The cloudy weather has retarded ripening of tomatoes, but prices did not advance. Hothouse or frame dandelions are about over, the outdoor product being preferred as more stocky and attractive. Rhubarb is becoming more abundant and gradually falling in price. Native spinach is in light supply. Cress is fairly plenty for the season. Southern string beans and some other Southern specialties were injured by the recent heavy rains in that section, and prices for good qualities have advanced.

Summer Milk Market.

The outcome of last week's conference between the Boston milk contractors and the New England Milk Producers Union is regarded as a decided victory for the producers.

Under the agreement signed March 26 the farmer is to receive an average price during the six months, beginning in April, of 35¢ a can. The price the contractors will charge the peddlers will be an average of 53¢ a can during the six months, beginning with a 35-cent price in April. This will mean, the contractors and peddlers say, that the consumer will be asked to pay 7 cents a quart for milk purchased while the agreement with the producers is in effect.

The clauses in the contracts which deal with the rating, the system by which it is determined how much milk a producer can send to the contractor he does business with, say that this matter shall be settled by agreement between the producer and contractor, but they say that the minimum rating shall be on the basis of last year's figures.

The agreement has been signed by both sides and the cards will soon be sent out for the producers to sign. The C. Brigham firm of even production is to be used by the Elm Farm Company, the Boston Dairy Company, B. Whitting & Sons and the C. Brigham Company; the producers to have the privilege of rating themselves at the average of last year's production, and a chance to vary thirty per cent. up and down from that rating. H. P. Hood & Sons' contract is to be practically the same as last season's, with the limited production clause omitted.

The contractors, as usual, claim that they are to pay more than they can afford under the new agreement, but they say they thought it better to make the concession than to expose Boston to a milk war, which the directors insisted would otherwise have begun April 1.

Before the final meeting the directors discussed the possibility of eventually placing nothing but union milk on the Boston market, and unanimously adopted this resolution: "That it is the sense of the directors, that we use our best efforts to make a price for union milk and union milk only." This is considered a strong hint for all milk shippers to join the union in order to secure its protection.

Producers for the Springfield market will also secure a good summer price. It is expected that the rate to be paid producers within a radius of five miles for milk brought to Springfield, Mass., will be fixed at 32¢ per ten-quart can, after May 1 for the summer months. This rate will be 2¢ a can less than the milk producers of Agawam want, but the majority of the producers, it is believed by officers of the co-operative milk association, will be satisfied with that rate. The retail and whole-

sale rates will be 6 and 4¢ a quart, respectively, and it is stated that more than 32¢ a quart can cannot be paid and maintain such a selling price. This rate is considered good, compared with what is offered the producers by the Boston dealers for the six months from April 1. The price offered is 35¢ a quart per can of 8½ quarts. From this must be deducted ten or twelve cents per can for freight, and the producer must deliver the milk at the railway station, and also wash his own cans. This makes the net price much lower than the Springfield rate.

An attempt is being made apparently to form a milk monopoly in New York State. Joseph Fowler of Montclair and A. M. Jones of Fairmont are the agents of a New York syndicate, but they refuse to state the names of the capitalists interested. These men are having agents canvass Rome, Oneida, Rochester and other cities in the same manner as in Syracuse. It is said that every milkman in Onondaga County has been approached.

The options are for ninety days. The syndicate will buy the routes, horses, wagons and other equipment. The farmers are to keep their cows and enter into a five-year agreement to furnish milk at 2½ cents a quart for six months and 3 cents a quart the other six months. Most of the producers have given these options. It is said that if necessary milk will be sold at cost in Syracuse in order to drive out independent dealers. The men who sell to the syndicate promise not to peddle milk.

Fowler and Jones say they are acting for New York capitalists, who are ready to pay 100 cents on a dollar for everything they buy. The price of milk will be raised 1 cent a quart at the start and may go up to 7 or 8 cents a quart. It is said that the syndicate aims to control the milk business of the whole State.

Egg Markets Fairly Steady.

Egg receipts at Boston and New York are heavy and show a tendency to increase. Prices are holding better than might be expected. There is some demand for duck and goose eggs.

A new factor in the egg market is the corner on egg cases, which has been contrived by certain Chicago speculators. The scarcity of suitable cases is expected to lower the number of eggs on the market. For the immediate consumers, they will be shipped loose in barrels and other packages and sold to the storage buyers, who will repack them in the city for storage.

Chicago dealers are looking for a nine and ten cent market during April for storage eggs. The scarcity of cases is likely to continue during April, as all the manufacturers are behind with orders. One of the selling agencies of the mills reports an average sale of over one thousand cases a day since Jan. 1, and there is now some difficulty in getting any kind of a carrier to handle eggs. A Chicago dealer thinks that taking into account the scarcity of cases, the scarcity of fillers, the timidity caused by last season's losses in storage eggs, and the anticipated large supply, the outlook is not so bright as it was a few years ago. On the other hand, the consumptive demand is very brisk, and in some sections the laying stock has been reduced in numbers on account of high cost of grain the past year or more. So far prices are holding up very well.

Grain Markets Firm.

No marked change has occurred in the grain situation during the week, but there has been a slight reaction against the comparatively low price level, and such changes as have taken place have been in an upward direction. There is no special reason to expect marked variation in either direction for the present. Prices seem to have reached a level as low as crop conditions warrant, and the export trade bids fair to take care of the surplus. Takings of one million bushels wheat for export are reported at Chicago, and one steamer took three hundred thousand bushels of oats. These shipments will start at opening of St. Lawrence water route. The outlook for the coming winter wheat continues favorable everywhere. The flour trade is dull and prices practically unchanged. Bag meal is same as last week. Bran and millfeed are several points lower. Cottonseed and linseed meals also show a slight downward tendency.

A device for suppressing sound and smoke has been provided for the ordinary rifle by a French soldier. It consists essentially of a steel tube about thirty inches long, with several partitions having orifices slightly larger than the bore of the gun, and this tube is attached in front of the muzzle by a bayonet clamp whenever its use is desired. On firing the gun, the gases are retarded by each partition in turn, finally escaping without sound or smoke. With a knife at the end, the auxiliary tube can be made to serve as a bayonet.

An old theory is that the earth is slowly drying through chemical combination of the water with the crust. A French geographer, M. Mariet, has been investigating numerous caverns and drying valleys, and has convinced himself that a more rapid absorption is taking place, and that our water supply is being swallowed up at an appreciable rate by the fissures and cavities of rocks and soil. He urges a more thorough study, with a view of lessening absorption if possible.

Historic Boston Common is being plowed and seeded down to grass and oats, the turf having nearly died out because of shade, wear and neglect.

Disinfection of the Brighton barns and cattle yards has been completed, and the yards at Watertown will probably be finished also by the end of this week.

Bradstreet's reports exports wheat for week 2,461,287 bushels against 2,383,538 bushels last week; 2,904,110 bushels last year; since July 1, 1,172,448,515, against 1,194,238,707 bushels last year. Corn for week, 3,618,210 bushels, against 3,072,068 bushels last week and 130,305 bushels last year; since July 1, 44,505,408 bushels, against 24,133,000 bushels last year.

Nathaniel K. Fairbank, founder of the N. K. Fairbank Company and the Fairbank Canning Company, and long one of Chicago's most prominent business men, died March 28.

Infected herds are still being discovered at the rate of one or two per day in New Hampshire. All are in Hillsboro and Rockingham counties. Government agents are making a farm to farm canvass, with a view to securing every case.

The season of navigation on Lake Champlain opened March 25, the steamer Chateaugay making her first trip from Burlington to Plattsburgh, N. Y., and return. This is the earliest season since 1871, and with that exception, the earliest since 1843.

The persistent drought is causing great anxiety among the farmers of Rumania. The wheat is suffering badly from lack of rain.

Secretary C. J. Bell of the Vermont State Board of Agriculture is engaged in getting material for a pamphlet which the board expects to issue soon, containing statistics of the attractions of the State, its summer homes, its property that is for sale, and facts pertaining to the industrial situation.

The value of all animal products on the Iowa farms last year was \$109,858,981, poultry products forming 11.5 per cent. of the whole. The animals sold, with a value of \$113,078,523, and the dairy products, with a value of \$27,616,876, were the only two products worth more than poultry and eggs.

The resignation is reported of Jesse K. Cope, State dairy and food commissioner of Pennsylvania. It is alleged that Cope's resignation was the outcome of a decision of the board of the governor to rid the State agricultural department of many of its old officials and appoint a new list on account of the various scandals attached to that office recently.

The shipments of wool from Boston to date from Dec. 31, 1902, are 63,525,365 pounds, against 63,300,217 pounds at the same date last year. The receipts to date are 47,897,418 pounds, against 54,929,842 for the same period last year. The market is again very dull in point of business, but if the demand has been very good, and large sales have been prevented only by the extreme low views of buyers. Bids 2 to 3 cents under current asking prices have been numerous and have been turned down. There is nothing new from abroad. The London auction sales closed with the late improvement maintained. Closing prices, compared with January closing rates, show an advance of 7½ per cent. in merinos and unchanged rates on crossbreds. America bought 8500 bales.

Within the last three weeks Charles E. Lyman, a well-known Middlefield (Ct.) farmer, has lost fifteen head of cattle through some unknown sickness. A number of other cows are sick and may die. The first symptom of the trouble was a film growing over the eyes, the cows grew thin and had a short convulsion before death. Examination showed the mucous membrane in throat, intestines and stomach was greatly inflamed. In fact, fairly out away in places, and it is possible that the stock may in some way have become poisoned. The chemist at the Connecticut Agricultural College will make a thorough examination before reporting.

Plans are being laid for the corn contest at the Iowa Agricultural College next January. The committee appointed by the Iowa Corn Growers Association to prepare the list of prizes to be awarded to the winners of the contest has reported and announcement has been made by Prof. P. G. Holden, head of the department of agronomy at Ames. Prizes will be awarded to the amount of \$2000. There will be two divisions of the prizes—first to the exhibitors of the best quality of corn, and second to those who make the most creditable showing during the short-course work.

The State road question in Massachusetts is likely to be settled by a compromise, advocates of the bill to appropriate \$200,000 per year for five years being unwilling to force an open conflict with Governor Bates, who favors a decided reduction. An amendment has been adopted by the House making the sum \$2,500,000 for the five years.

A Remedy That Should be in Every Household.

WHITNEY'S POINT, N. Y., Jan. 26, 1903. The Lawrence-Williams Company, Cleveland, O.: I used your Gombault's Caustic Balsam on a yearling colt that had an enlargement of the nodule. It was quite a bunch. Your Balsam cured it without a scar. It should be in every household. JOHN H. KNAPP.

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TELEPHONE NO. 3707 MAIN.

Now it's the smoky chimney that may begin to feel anxious.

The Lowell knitters are not yet unanimously willing to say so!

It's a very fit moth that will be able to survive the campaign of the Beverly Improvement Society.

When all is said and done, isn't that man rather vain glorious who doesn't allow himself to be April fooled by his own children?

The Lynn experimenter has probably decided that it's no more use trying to shoot a nightmare than it is trying to "shoot" one.

One of the first requisites of modern authorship is apparently to have a photograph that will reproduce well in the newspaper.

Noah Roby, the 131-year-old inmate of a New Jersey penitentiary, enjoys the peculiar distinction of not being in possession of all his faculties.

Even were imagination a universal possession, it would still be difficult for some of us to accept the reportorial picture of Signor Masagnoli expressing himself as being in love with America.

The maxims of the late Mr. Swift of Chicago have all the breeziness that characterizes up-to-date words of wisdom for the young in business.

Judging by the predominance of Butterick interests in the recent change of ownership, Everybody's Magazine will now be conducted on a new pattern.

Mr. Morgan's optimism, regarding our present prosperity, well deserves general circulation. Pessimism and misguided terror play an important part in the making of panics.

A real daughter of the Revolution is reported to have died of old age, some days ago, in a Brookline Home for Aged Women. The report does not say what office she held in the D. A. R.

The spirit of Robin Hood, or, at least, a part of it, seems still to exist in the person of the Chicago robber who compelled his victim to allow himself to be treated at the saloon nearest the scene of the robbery.

After all, Smith College has comfortably survived a good many escapades on the part of its students; and "Mary Duncan" seems to have been a fairly harmless bit of undergraduate humor, once professional dignity has recovered its equilibrium.

Twenty-eight thousand dollars for a copy of Job's "Lamentation" is a figure that may make the modern author feel envious. But then, as the comforters might have said, Job is too dead to get much amusement out of his profits.

No, Boston will probably not follow the example of Des Moines and assemble her largest families as a prize exhibit whenever the President next comes to this direction. Judging by the recent tenor of our vital statistics, however, such an exhibition would give the typical Bostonian something to think about.

Speaking of the publisher's trust, one recalls the remark made by a London writer at a gathering of authors during the time of Napoleon. The emperor had come in for a good share of abuse when this particular author rose to protest. "Gentlemen, gentlemen," said he, "let us not forget, whatever else Napoleon may have done, that he once shot a bookseller."

If the quarantine of eastern Massachusetts is not removed before the opening of the pasture season, the situation will be very embarrassing to cattle owners. Since the regulations forbid transportation of cattle across the highway, farmers will, in many cases, be unable legally to so much as drive their cows to pasture without a permit from the cattle bureau.

Milk producers for Boston market are looking forward to a prosperous season. With grain and millfeed at reasonable prices, pastures starting in good condition and milk contractors paying nearly two cents per can more than last summer, a decent margin of profit may fairly be expected. High prices for cows and extreme wages for farm help are among the drawbacks, but the outlook, as a whole, is the best for years.

A contemporary has raised the question: Should a little boy be taught the cruel trade of war by being permitted to play with tin soldiers? This is a very nice question, closely following the terrible results that, to some minds, link themselves irrevocably to an early belief in that fictitious person, Santa Claus. For ourselves, we shall never be happy until we have decided also whether little boys should be permitted to play circus.

When Mr. Clyde Fitch tells the students, dramatic club out in Cambridge that the reiterated demand of American managers for American plays is simply a pose for the benefit of the American public, he doubtless knows whereof he speaks. On the other hand, however, will there ever be any great number of American plays, that are worth acting, until an equal number of American playwrights can compete in the market with the work produced by their foreign contemporaries?

The five great irrigation projects planned under Government direction would open up one million acres of arid Western land at a cost of at least \$10,000,000. The idea is to make the land pay for the improvement by assessing the cost on the owners in annual installments. Completion of the project will enormously increase the competition to be met by Eastern fruit growers and farmers, but the country, as a whole, will be helped by such important addition to its resources and productive power.

The startling "corn-wheat" story that has been going the rounds the past few months has at last been mailed by the Department of Agriculture. The "new grain" appears to be nothing more than a variety of wheat with large grains but with no other special merit, and apparently not deemed worthy of Government distribution, being at best adapted only to droughty regions. The stories described it as a won-

dertful cross between corn and wheat, and the description was copied by papers which should have known better.

That projected milk trust in New York State may be managed in good faith, but producers should bear in mind the way in which New England milk farmers were bled three years ago through a somewhat similar scheme. Even with the best intentions on the part of the promoters, projects involving such a multitude of interests are not easily established. The safe side of such plans is for producers not to pay money or agree to pay it. If a better market is offered for milk, it is well to be very sure as to the exact meaning of the contract in that connection.

The victory of the milk producers union shows the growing strength of organization among farmers. Not so many years ago, a similar conference would have ended mostly in talk, with the situation favoring the contractors. The former weakness of the union lay in the knowledge that producers would not hold together properly in case of resort to extreme measures. But during the last two or three years the backbone of the union directorate has stiffened wonderfully as a result of the growing strength of the support received. On the other hand, the contractors have learned that the real power is in the hands of those who supply the milk, and they no longer expect to have things all their own way. This feeling of wholesome respect on both sides has led to a compromise conceding something to the demands of each party to the controversy, yet, as compared with similar treaties in the past, it is considered a positive triumph for the producers.

The First Step.

It has been said often that it is the first step that counts, and exemplifications of this adage are daily presented to view. We need not go beyond our city to point out men who were once respected, but who yielded to the temptation to depart from the path of rectitude, but temporarily they thought, but who soon found themselves enmeshed in a web of difficulties from which there was no escape from final exposure, followed by flight, imprisonment or suicide. A love for extravagant living, a desire to make a show far beyond that warranted by one's income, has often led up to this first step that makes a criminal of an honest man, and a love of ill-gotten pleasures has been another frequent cause of an irretrievable fall from a high estate in the respect of men.

Pennell, whose name has been so mixed up in the Buffalo Burdick tragedy, and whose own death followed soon upon the taking off of his former friend but later enemy, was a man much esteemed by his early associates at college and elsewhere, and was thought by them to be above reproach. They regarded him so highly that they refused to believe any of the stories that were circulated to his discredit. And, no doubt, in his early days he earned affection and respect by his engaging qualities, for one does not become either a saint or a sinner all at once. The growth in both goodness and badness is gradual, and a man does not recognize that he is ascending or descending until he reaches a point where he is compelled to look back upon his past career. No doubt up to the last Pennell considered himself a pretty good sort of a fellow, and did not realize that he had drifted apart from his earlier standards of manhood, honor, and duty. He did not recognize, amid the dissipation in which he was indulging, that his moral character was steadily deteriorating, and that he was unfaithful in all the relations of life.

It is true that it has not been proved that he was a murderer, and since he has passed out of existence, we can afford to give him the benefit of the doubt, but the circumstances surrounding the mystery which his name is linked are not of a character, under any conditions, that entitle him to respectful consideration. Pennell's own death was as startling as that of Burdick, and may not have been self-inflicted, though suspicion points significantly to suicide, if not to something worse, but we need not condemn him unheard. Enough, however, has been revealed concerning his later career to show that he had not lived up to the promise of his youth and young manhood, and that he had followed his first step in the wrong direction with other steps that led him downward into a bewildering maze of misfortunes. Daniel Webster said long ago, in a celebrated criminal case in this State, that suicide was confession, and if Pennell could be proved to be a self-destroyer, there would be little doubt of his having won the unenviable distinction of wearing the brand of Cain upon his brow, thus following up the first false step with the last degree of crime.

National Sensitiveness.

There has been much about nothing in the Fatherland regarding Admiral Dewey's unofficial criticism of the German navy. Not perhaps so much flutter as there was about Cogan's recitation of Hoeh der Kaiser on a social occasion, when he was merely a guest among guests, who were trying to entertain themselves informally after a particularly good dinner, but enough to show that Germany, as represented by her government, is very touchy about any complimentary remarks concerning her in any direction.

At the same time, she takes very kindly to uncomplimentary remarks that may be made about the United States and her naval and military developments. Therefore, it is mightily pleased with Count von Reventlow's strictures in the Berlin "Tagblatt" of the American navy, which, of course, is not all that it should be, owing to the opposition to its enlargement and improvement that has always existed to some extent in our country. Now we do not object to Count Reventlow's reflections as far as they are true. On the contrary, we welcome them as a desirable means of seeing ourselves as others see us, but we are, nevertheless, of the opinion that what is sauce for the goose is sauce for the gander, and we cannot understand why the German officials, from the Kaiser down, should manifest so much sensitiveness whenever a voice is raised here to say that there are German shortcomings. Doubtless, both Cogan and Dewey were too frank and perhaps indiscreet in their utterances, but naval officers are rarely, if ever, diplomatic, and they have sometimes too much of the proverbial bluntness of the sailor for their own good. Still, they should never have been taken so seriously by our German cousins.

Germany, with all her pretensions of friendship, is watching this country closely, and knows as much about our naval strength and weakness as we do ourselves, though, perhaps, she misjudges our attitude toward armored cruisers. What her ultimate object is in securing so much information regarding our navy it is impossible to say definitely, but Germany under its

present emperor is a distinctively aggressive nation that is reaching out to obtain more possessions than are now included under her dominion. England realizes this as well as the United States, and naturally neither are inclined to let Germany advance in any way that will weaken their power.

In a small way the Kaiser is an astute statesman, and he hopes by professions of friendship to divert attention from his real purposes, which are, evidently, to make himself remembered as one of the great rulers of his country. As for destiny, who has heaven on his side in his plans for conquest, peaceful or otherwise. Of course the world does not have the confidence in him that he has in himself. If it did, he would be a really great man.

Roosevelt and the Navy.

In Chicago on Thursday night President Roosevelt delivered a notable address in which he said forcibly that he believed in the Monroe Doctrine, heart and soul. This is an emphatic utterance of the belief that he has been credited with holding for a long time, and is one which will please the majority of his fellow countrymen. He was equally strenuous in asserting that the Monroe Doctrine must be maintained by having an efficient fighting force to defend it if any foreign power should attempt to violate it under any conditions.

Here he voiced the opinion of the thoughtful men of the country, who do not hold with those economical extremists that the navy is almost an unnecessary expense in time of peace, and that it should be kept in a condition of comparative inefficiency, which would make it of little service if an emergency should arise, whereof our rights in this Western Hemisphere might be disrupted and attacked.

A strong naval force is needed for the maintenance of our dignity, for, as the President indicates, the carrying of a big stick, coupled with a conciliatory attitude, always in respect. In the words placed in the mouth of a prime minister by the dramatist: "First all means to conciliate; failing these, all means to crush." We must be great on the sea as well as on the land, where we need fear no European power. If a foreign nation should attempt to enter the United States with an army, it would find itself in much the same condition as was Napoleon, when he invaded Russia and met with inglorious defeat. Armed men would spring up from every corner of this great republic as suddenly as did the Highlanders at the summons of Roderick Dhu, and, therefore, a naval force of the magnitude of the Monroe Doctrine, which, after long waiting, will give us control of the Isthmian canal.

Sugar Crop a Failure.

The sugar season opened three weeks earlier than last year, and a few days later the weather became very warm, the maple buds began to swell, the untended and the season ended before the normal season would have opened. In consequence of such weather the season and crop have been almost a total failure. Several large sugar places were not tapped at all, and many did not tap until the short season was nearly through.

The make can hardly be estimated, but it is thought to be about fifteen to twenty per cent of a normal yield. Producers who have their sugar or syrup on hand are in no hurry to sell under what in average years would be fancy prices. Some may think it will be a hard year for the adulterators to secure stock for their goods, but my observation is that it makes but little difference to them, as extracts are made to take the place of maple in flavoring their output, so none who are willing to use city-made maple syrup need worry about that part of the crop being short.

Fairfax, Vt. L. R. T.

The Outlook in Central Vermont.

The snow is all gone in the cleared land. It came on so late, Dec. 5, we had sleighing for a normal year. There were no heavy storms during the winter, but the large number of them, and the proportion of cloudy days was perhaps never equaled before. Stock of all kinds has wintered well and have not consumed a large amount of fodder.

The maple-sugar season is in progress. So far the flow of sap is very small, and indications are unfavorable for a large run, but there is likely to be a good demand with high prices. George S. Taylor, of Tunbridge, has about one thousand trees tapped, making about fifty gallons of syrup last week. He received an order on the eighteenth for two hundred gallons at \$1 per gallon.

For February the Orange County Creamery, Chelsea, received 246,420 pounds of milk and 1894 pounds of cream, from which were made 13,310 pounds of butter, for which twenty-five cents per pound was paid to patrons. H. P. W. Orange County, Vt., March 23.

Will Free Delivery Help Roads?

The great obstacle to the general spread of the rural free delivery system is the miserable roads of the country. So far the system has only been extended to communities blessed with good roads. Among the many communities demanding the introduction of the system, the Postoffice Department has been able to select those which have good roads, either as a result of favorable natural conditions or superior wealth. The less favored communities which have been passed by have consoling themselves with the thought that their turn would come soon.

But when these disappointed communities—and their number is increasing very rapidly—find out that they are passing up the benefits of free delivery, on account of the condition of their roads, a cry of indignant opposition will be raised; and it will grow into an angry roar, above which it is doubtful if the friends of free delivery can be heard. When this storm breaks, the beneficiaries of the system will be found to be a small minority, and the disappointed a large majority of the rural population. Suppose the minority stands on its dignity and says: "What are you going to do about it?" What's to prevent the disappointed majority from wiping out the whole system and then restoring "equality before the law"? Or suppose the minority says: "Why don't you improve your roads, and thus secure the blessings of free mail delivery?" The majority can answer: "In improving our roads we have to overcome greater ob-

stacles, and our means are less. Why not help us improve our roads through general taxation?"

Such a demand as this is almost certain to result from the agitation for rural free delivery of the mails. And what is there unreasonable or unjust about such a demand? The general improvement of the roads of the country is a work too stupendous to be left entirely to the small municipalities. Besides, is it not more deserving of national aid than the building of the railroads and canals and the improvement of rivers and harbors?

A proper distribution of the expenses of general road improvement among the nation, the States and the local communities appears to be the only practical solution of the road problem, and the road problem must be solved if rural free mail delivery is to be made general. W. P. BROWNLOW.

Choosing a Farm.

The farmer will find chances enough for his strength and skill and enterprise in the older fields which lie nearer the populous market, and bring him within the reach of the library. If a man has by nature a taste for the active associations of life, he should select a farm near the populous center, and adapt his farming to the wants of those who supply him with his market. From one end of our land to the other these opportunities now exist.

But whatever may be the location, the choice of suitable land should not be forgotten. If you would cultivate a nursery of fruit trees, choose your land accordingly; if you would plant a vineyard, select a proper site; if you would supply a market with early vegetables, select wet land and strong soil.—Frank B. Allen, Hampden County, Mass.

The day of drifting, thinking of making a success along any line of business has gone by; the man that would make a successful farmer must set his standard high, and then set out with a determination to rise to it. How many of our farmers are satisfied to remain on the lower plains of life, spending a large amount of time in the taverns and postoffice, smoking and gossiping.—Frank B. Allen, Hampden County, Mass.

Too many of our farmers are too much like our Aborigines—in want at one season, over-satiated at another. I think too much emphasis cannot be put on the start, when a boy is young. As soon as he can earn a few pennies, interest him to save and lay away at least fifty per cent. of what he earns. This habit will grow as he gets older, and he will soon discover that he has a reserve on hand that will come in very handy when he has need of it.—Frank B. Allen, Hampden County, Mass.

I have noticed that a medium size in all animals is the hardest point for the farmer to preserve. Large cattle and horses fascinate some; they may be good in their place, but not for general use. The medium-sized animals are the most profitable, most easily fed, and can endure the most hardship. Select well and feed well, and you may be sure that the animal will reward his owner.—Frank B. Allen, Hampden County, Mass.

Make Dairy Improvements Permanent.

Permanent work is the only kind that pays in the dairy. Now, in the springtime, which is really the beginning of the dairy year, it is well to emphasize this fact and note its importance. If you have a dairy business, avoid a makeshift policy in refitting the dairy house for the season's run. Indulge in but little patching on partially worn-out utensils, for you will be found that in most such cases it is so easy to start in with new. Do you know that better cheese and butter can be produced in a building made to last a lifetime than in a temporary shack?

Do not start to set milk or make butter in a room from which all the musty odor has not been dissipated by plenty of hot water and fresh air.

When you raise cows do so in such a permanent way that they will round out their natural spheres of usefulness for ten, twelve or even more years. Give them honest care and liberal rations while they are young, and never get out of the habit later on.

Permanency pays even to the springtime repair of a pasture fence, as one will realize later when growing crops tempt grazing cows.

A covered roof of stanchions in a clean corner of the barnyard is better for summer milking than a close, stuffy stable, but do not make it so flimsy that the first high wind will blow the roof down, as I have seen done. Place it on a slight elevation if possible for drainage, and gravel the surrounding ground as an aid to cleanliness. When you do a piece of repair work in any department of your dairy, perform it so well that it will require no further attention for the rest of the season at least. The strict observance of this rule often means the saving of many dollars and the avoidance of an infinite lot of trouble. Don't forget that permanent work in dairying now means a competence by and by, while the opposite course leads to hard times. GEORGE E. NEWELL.

Good Calf Care.

The calf should be cleaned at once after the birth by careful rubbing with dry cloth or dry straw, as the calf respires only through the skin. The calf should be protected against dampness and draught—it is very tender while young. It should have the milk in small portions, and as often as the cows are milked, as only then we get the full benefit of the milk.

New milk should be fed exclusively for the first fourteen to twenty days. The calf should have part new, part skimmed milk from about the twentieth to the fiftieth day. Feed skimmed or other similar liquid food; till at least three months old, and after that as long as can be afforded.

Give the milk at blood heat, but this should, new-as well as skim, be first heated to 176°. The calf should have oatmeal gruel and good fine hay at the time when feeding skimmed milk commences.

Use clean pails; uncleanliness may cause deadly sickness. The calf should be made to drink the milk slowly in order not to disturb the digestion.

Profit from Sheep.

My sheep have gained me from start of feeding to finish eight to ten pounds of mutton per bushel of corn, while the gain of my cattle of equal quality and feed runs from seven to eight pounds. My hogs eat corn, corn from first to last, and only a little grass for change, while my sheep eat grass, grass from first to last, and only a little corn to start them and to finish them. That is the cheap feed vs. high-priced feed.

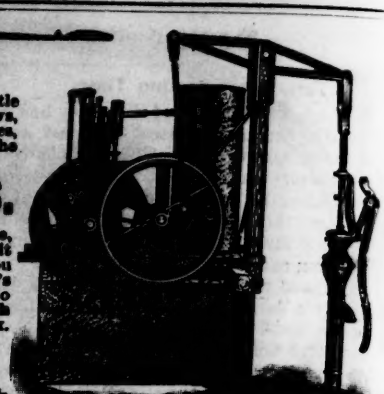
I find from my shipping bills, which I have saved for twenty-five years, from 1873 to 1898, that the average price received for my stock in Chicago during that period was \$4.38 per one hundred pounds for sheep,

ALL ENERGY.
That's the only fitting description of this little power. And because it not only pumps, but saws, grinds, cuts, crushes, separates cream, runs lathes, cider mills, ice cream freezers, etc. We call it the

Jack-of-all-Trades.

Unlike the human Jack it is master of every one up to its limit, 3 full h.p. Think of the ways it can serve you. And do you know it charges you only from 1 to 2 cents per hour for gasoline? It's always ready. Never balks or waits for wind to blow. Strong, safe, efficient. You need just such a power. Write for our free booklet on the Jack. All size, all purpose engines up to 800 h.p.

CHAS. J. JAGER COMPANY,
174 High Street, Boston, Mass.



\$4.86 for steers and \$4.85 for hogs, and the average weight was sheep 125 pounds, steers 1354 pounds, and hogs 218 pounds. From this you can see they had to be all of good stock to average that weight.

The foregoing facts, obtained from my experience, convince me that sheep are, in general, the most profitable stock on a farm, especially on thin and high land. In conclusion, I will say, keep none but the best of whatever breed you have. They will pay when poor ones lose. Sheep are easy to handle and easy to retain in an inclosure that would not hold other stock, and they are the best weed destroyers on the farm. Taking all things into consideration, the sheep certainly has much to commend it to the farmer.

JACOB ZIEGLER.
Clinton, Ill.

Recent Tests of Jersey Cows.

Honedale 147772: Sire, Coomassie's Triple King 37339; dam, Capote 115608. Fat, 12.3005 pounds; milk, 228.6 pounds. Test made from Feb. 19 to 25, 1933; age, 5 years; actual weight, 1550 pounds; fed corn ensilage, shreds of corn stover, clover hay, and then set out with a determination to rise to it. How many of our farmers are satisfied to remain on the lower plains of life, spending a large amount of time in the taverns and postoffice, smoking and gossiping.—Frank B. Allen, Hampden County, Mass.

Set of Suncook 137782: Sire, Exile of Maine 36332; dam, Suncook Girl 137605. Butter, 16 pounds 13 ounces; milk, 224.6 pounds. Test made from Jan. 26 to Feb. 1, 1933; age, 6 years 7 months; estimated weight, 850 pounds; fed 3 pounds dried distiller's grains, 34 pounds wheat bran, 31 pounds cotton-seed meal, 34 pounds corn meal and 35 pounds roots daily—hay and cured silage corn ad lib. Property of Dunn Brothers, Concord, N. H.

Rioter's Lorlie 133359: Sire, Rioter of Macomb 40448; dam, Lorlie Vayne 24 89187. Butter, 16 pounds 1 ounce; milk, 268 pounds 10 ounces. Test made from March 25 to 31, 1932; age, 5 years 7 months; estimated weight, 1000 pounds; fed 14 pounds linseed oil meal, 42 pounds coarse middlings, 14 pounds corn meal and 24 pounds corn ensilage—hay ad lib. Property of George R. Nichols, Mount Clemens, Mich.

Sokamria 140936: Sire, Sozias 43355; dam, Kamarett 80479. Butter, 16 pounds 1 ounce; milk, 221 pounds 10 ounces. Test made from Nov. 25 to Dec. 1, 1932; age, 4 years 11 months; estimated weight, 950 pounds; fed 69 pounds corn and oats chop, 264 pounds oil-meal, 30 pounds wheat bran and 200 pounds corn ensilage—hay. Property of estate of C. Delano, Mount Vernon, O.

From the Shepherd's Notebook.

The feet of every member of the flock should be trimmed before sent to pasture. The best breed of sheep is the one that suits both taste and requirements.

Liking induces interest; interest brings enthusiasm and enthusiasm pays in sheep-raising.

The shepherd that treats his sheep like friends is the most successful in their care. A ram must be a typical specimen of the breed he represents in order to secure results expected.

Pure air and sunlight have a favorable effect in the breeding of ewes.

Their quarters should be kept dry. Feeding a lot of rich grain the first few days before yearling is a common mistake and causes a good deal of trouble, which often occurs both to the ewe and the lamb.

If the ewe is weak at lambing time, oatmeal is one of the best and most strengthening foods.

If this nourishing, increases the milk flow and prevents bowel trouble in the offspring.

The special twine made for tying wool should always be used, as unsuitable material is liable to interfere with certain parts of the machinery used in the separation of the wool.

A lamb that is plump and fat without undue forcing with heating foods makes the best growth.

Field Notes and Jottings.

Strawberry plants will be injured badly by ten minutes drying in the air while being set. A good plan is to distribute them in little boxes along the rows. They are taken from the boxes one by one and set immediately. Set even with the surface and press so firmly that a leaf could be pulled off without starting the plant. To cultivate the newly set plants, a horse weeder is the implement to use.

"I do not put anything in my orchard. I calculate that the trees will need all that the ground will produce. We go through it with a gang-plow when necessary, and we keep it worked up with a large spring-tooth harrow—just keep the weeds worked down and keep all the manure on it I possibly can. I believe nothing can be put on an orchard that is better than good wood ashes.

In some experiments at the Michigan station in spraying peach trees with copper sulphate solutions of varying strength for leaf curl it was found that "trees sprayed early with one pound of copper sulphate to one hundred gallons of water showed no more curl than trees sprayed at the same time with one pound of copper sulphate to twenty gallons of water." Like results were obtained when one pound of copper sulphate was used to two hundred gallons of water. In the test of fall and winter pruning of peach trees vs. spring pruning, no difference could be noted in the crops of the following season.

Black rot in grapes causes the decay of the green berries, which do not fall but dry up on the branch. The leaves and twigs of the grape are affected by the brown rot, as well as the fruit. The first signs of it are whitish patches which later turn brown. Affected berries turn dark brown and wither. Powdery mildew, a parasitic disease, appears on leaves and twigs as a powdery growth. Sometimes the fruit on mildewed vines cracks open.

Where these diseases show themselves, it is well to keep the vines in vigorous health, and spray before the buds open in the spring, after budding, and once ten days later. Four pounds of blue vitriol and four pounds of slaked lime mixed with a little water and diluted with fifty gallons of water, make a good spray.

The formulae he recommended for killing

San Jose scale, by E. R. Bennett of the Connecticut Experiment Station, is thirty pounds of sulphur, thirty pounds of lime and fifteen pounds of salt. The lime should be slacked and mixed with the sulphur while hot. The two should be boiled for an hour, adding sufficient water to cause them to boil. After an hour's boiling the salt should be added and the contents should be given another boil of fifteen minutes and fifty gallons of water added. The wash should be applied to the trees hot. The trees should be sprayed before the leaves come on. Sometimes one application will exterminate the scale, but a second application it was believed would entirely exterminate it. Mr. Bennett says kerosene oil had been used on trees to exterminate the scale when the trees were in foliage. He does not recommend it, as it was liable to kill the trees unless used with care.



This Gasoline ENGINE

is acknowledged to be reliable, all not so dear at any price. Reliability is the only test of cheapness. Write for our special offer No. 7. It is liable to save you money. We are the largest water supply house.

Smith & Thayer Co.
236 Congress Street, BOSTON.

HAYMAKER RASPBERRY.

Words cannot express its grandeur. No description can adequately portray its crowning merit. Never has its equal been seen. It will pay the heaviest debt on any farm better than any other machine. I bought my first plant of A. C. Haymaker in 1901. I now have 10,000 to sell. I could have had more. I rooted out the strongest. Price of plants, 25 cents per dozen, postpaid; \$2.50 per 100 \$20 per 1,000.

Grandest fruit, finest milk, 1,000 shades, 25 cents per dozen; \$1.50 per 100, postpaid. Strawberry and raspberry plants, send for catalogue.

C. S. PRATT, Reading, Mass.

The Standard Co. manufacture the best line of Bone Cutters made. We ship any size on trial in competition. The line consists of eleven different sizes for hand and power, ranging in price from \$6.75 to \$100.00. The principle of automatic feed, horizontal cylinders—knives cutting across the grain. Every machine warranted. Send for catalogue. STANDARD BONE CUTTER CO., Milford, Mass., U. S. A.

Silos

Get full value from the corn crop by siloing the corn as recommended.

Ensilage Making

and preserving is our specialty. Right machinery, right material, right instructions. No siloing is so moldy and rotting of contents. Catalogue mailed free.

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174 High St., Boston, Mass.

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More varieties of quality have been introduced by us than by any other seed company of the United States. The Hubbard, Marblehead, Victor, Warren, Golden Breeze and Butman, being among the pumbers. Send for our new catalogue of vegetable and flower seeds. We sell the purest grain seed in the U. S.

J. J. H. Gregory & Son, Marblehead, Mass.

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The Cheapest and Most Lasting Fertilizer in the World.

Now is the time to order a CARLOAD for your ORCHARD and FRUIT FARM. The ashes on your run-down meadows and watered pastures; they will bring in nice clover, and are the most sensible manure for other crops, and come cheaper than other manures and last longer.

JOYNT'S are the best. Write for prices delivered at your depot, and address: JOHN JOYNT, Lucknow, Ontario, Canada. Reference—Bank of Hamilton.

Our Homes.

The Workbox.

KNITTED SQUARE DAILY.
Linen thread No. 30 or coarser may be used. Two steel needles No. 16 or 18.
Cast on 50 stitches, and knit two rows plain.
1st row—Slip 1, 2 plain (narrow, over twice, narrow, 6 plain) 4 times, narrow, over twice, narrow, 2 plain.
2d row—all even rows—Plain knitting.
3d row—Slip 1 (narrow, over twice, narrow, narrow, over twice, narrow) 4 times, narrow, over twice, narrow, narrow, over twice, narrow, 1 plain.
4th row—Like first, seventh like third, ninth like first, 11th plain.
13th row—Slip 1, 7 plain (narrow, over twice, narrow, 6 plain) 3 times, narrow, over twice, narrow, 2 plain.
15th row—Slip 1, 5 plain (narrow, over twice, narrow, narrow, over twice, narrow, 2 plain) 3 times, narrow, over twice, narrow, 2 plain.
17th row—Like 13th, 19th like 15th, 21st like 13th, 23d like 11th.
Commencing with 13th row, knit twice through the work, then repeat first 12 rows and bind off loosely.
For Border—Cast on 13 stitches.
For Side—1st row—Slip 1, 3 plain, narrow, over twice, narrow, 1 plain, over, narrow, over, narrow, 2 plain.
2d row—Plain knitting, making 2 stitches of the over twice (this is done by knitting one-half plain, the other half seamed). All even rows the same.
3d row—Slip 1, 1 plain, narrow, over twice, narrow, over twice, narrow, over, narrow, over, narrow, 2 plain.
4th row—Slip 1, 3 plain, narrow, over twice, narrow, 3 plain, over, narrow, over, 2 plain.
5th row—Slip 1, 1 plain, narrow, over twice, narrow, narrow, over twice, narrow, 2 plain, over, narrow, over, 2 plain.
6th row—Slip 1, 3 plain, narrow, over twice, narrow, 3 plain, over, narrow, over, 2 plain.
7th row—Slip 1, 1 plain, narrow, over twice, narrow, narrow, over twice, narrow, 2 plain, over, narrow, over, 2 plain.
8th row—Slip 1, 3 plain, narrow, over twice, narrow, 3 plain, over, narrow, over, 2 plain.
9th row—Slip 1, 1 plain, narrow, over twice, narrow, narrow, over twice, narrow, 2 plain, over, narrow, over, 2 plain.
10th row—Slip 1, 17 plain.
11th row—Bind off 5, 12 plain, repeat 6 times, then for corner, knit:
1st row—Slip 1, 9 plain, over, narrow, over, 2 plain.
2d row—Twelve plain, leave 2, turn work.
3d row—Slip 1, 7 plain, over, narrow, over, 2 plain.
4th row—Eleven plain, leave 4.
5th row—Slip 1, 6 plain, over, narrow, over, 2 plain.
6th row—Ten plain, leave 6.
7th row—Slip 1, 5 plain, over, narrow, over, 2 plain.
8th row—Nine plain, leave 8.
9th row—Slip 1, 4 plain, over, narrow, over, 2 plain.
10th row—Eight plain, leave 10.
11th row—Slip 1, 7 plain.
12th row—Bind off 5, 12 plain. Repeat these 12 rows 4 times for each corner, knitting side patterns between. Join ends of border.
EVA M. NILES.

Why Have Padded Shoulders?

Every man should have well-developed arms and shoulders so that he may look his best at all times, and be able to take care of himself in any sort of physical emergency. Physical culture will give them to any one who will practice it assiduously.
Padded coat shoulders do not make a man prepossessing. They simply indicate that underneath the pads are thin and bony shoulders from which flabby arms swing.
Thin shoulders and flabby arms generally mean stooped shoulders, for the muscles which are used to keep the shoulders erect are not developed. Stooped shoulders put the whole body out of its correct plumb, and a body improperly poised is not an attractive object.
Arms that are not muscular are likely to hang incorrectly, generally too much forward or bent at the elbows. Proper circulation of the blood is prevented thereby, and the arms gradually starve.
Then, too, arms that hang forward when the possessor is walking, depress the ribs and interfere with the proper action of the vital organs. Only arms that are muscular will hang in the proper position, which is straight along the sides of the body.
Weak and spongy hands are a direct result of flabby arms and shoulders. The hands cannot be strong when the muscles above them are neglected. A man with a listless grip is frequently a man with an undeveloped arm.
The following exercises are guaranteed to give well-developed arms and shoulders to all who will practice them. They should be taken up ten or fifteen minutes each day, both just after rising in the morning and before retiring for the night. Do not be afraid to put all your energy into the movements—you will be benefited the more speedily.

Exercise I.—To secure powerful biceps grasp a medicine ball, or an ottoman, or anything of a medium nature, between tightly clenched hands, the backs of which are turned downward. Place the elbows at the sides of the body and have the forearms at right angles to the upper.
Then, while squeezing the fists in on the ball with might and main, gradually raise the ball to and press it hard against the chest, while the ball was rising it was, expanded to its fullest extent by deep inhalation.

Keep the ball in this position until weariness comes. Then relax completely, dropping the ball to the floor. This is done so that the blood will fill up the arms more readily. That part of the body not used in the exercise should be kept in the correct standing position.

Exercise II.—This is executed as the previous exercise, with the exception that the ball is held between and squeezed by the palms of the hands in this way the inside of the biceps and the forearm is developed.

Exercise III.—With the left elbow at the body's side, hold the medicine ball in the palm of the left hand. Place the right hand on top of the ball in such a position that the little finger will be higher than the thumb and twisted toward the shoulder.

Then, while resisting with the left hand, push the ball downward with the right, and vary this movement by pushing up the ball

while resisting with the right. Also hold the ball in the right hand and place the left on the top, and repeat the exercise as outlined.

This is a splendid exercise for the back of the shoulders and the arms, and will build up these portions in a few weeks of steady practice.

Exercise IV.—Starting from the correct standing position, place the outstretched arms behind the back, with the hands below the hips and grasp the medicine ball in clenched hands, with the little finger turned outward. Raise the elbow as much as possible, at the same time lowering the shoulders to the fullest extent.
After this position is gained shove the arms and ball down hard and low. Hold for a moment and then relax.
When the elbows are at their highest possible point, the shoulders are improved, and when the ball is closest to the floor the back of the arms are exercised. The triceps, therefore, are benefited by this movement.

Exercise V.—Lie down flat on the abdomen, with the legs together. Keeping the body straight and unbending, raise it from the floor, supporting it on the toes and finger tips.
When the arms, which should form right angles with the shoulders, are fully straightened, hold the position until the hands and the forearms, which are severely exercised, become tired. Then relax, and, as with all these movements, repeat after a brief breathing spell.
This exercise may be varied by raising the body on first the right and then the left hand.

To strengthen the wrists, raise the body on the knuckles, on either side of the hands, and on the flat of the clenched hands.

Exercise VI.—Gaining the correct standing position, hold the arms out straight from the shoulder, entwine the fingers and turn the backs of the hands toward the face. Shove the shoulders well forward, and then, as if the arms were heavily weighted down, raise them gradually and place them back of the head as far as possible.

When this is done, send the elbow back as much as you can. Hold the position until pain is felt, after which relax entirely. This exercise, which develops the shoulders and the outer portions of the upper arms, is excellent for straightening rounded shoulders and keeping them in proper position.—N. Y. Sun.

Drug Habits.

It is a regrettable fact that nothing is easier to form than bad physical habits, and nothing harder to break than such habits when they have been formed. For this reason the watchful care of young people during the habit-forming period of life should be the duty of parents and guardians.

Among these bad habits may be placed those little tricks of self-medication that are so fatally easy to fall into. There comes, for example, the first attack of a sneeze, an eruption of the skin, to which many young people of both sexes are subject for a year or two. It is, of course, easier to give a trial to some drug than it is to enter upon a self-denying course of exercise and bathing, fresh air, patience and abstinence from candy. The advertised drug may be harmless, in which case it is likely to do no good. If it has some quickly potent effect, it possesses properties that should leave it to the control of a trained physician who knows something of his patient before he writes a prescription.

Young people, fortunately, are likely to be good sleepers. When for any reason they are not, they are also likely to be more intolerant of the tedium of wakeful hours than are their more disciplined elders. Here again it is easy to experiment with some one of the many "quieting" medicines, so highly spoken of, so "harmless."

A good sleeping off, five minutes brisk exercise and a slowly sipped cup of hot milk would be much better, and would prevail eventually, if not the very first night. Many a victim of the morphia habit owes the first impulse to the self-prescribed quieting doses of some well-disguised, far-distant cousin of that valuable, but much abused and dangerous drug.

It is a well-known fact that alcohol is the basis of many of the so-called tonics, and is to be found in considerable quantities in some of them. Whatever opinion one may hold of alcohol as a medicine, nothing can be said in favor of allowing it to masquerade in unknown quantities and doubtful quality in all sorts of medicines put up for self-doctoring. No more insidious plan for the forming of a bad habit could be devised.

If one needs alcohol one's doctor will know it, and how much and what kind; and the safe way is to go to him for a prescription. We have all heard of the man who was unwilling to leave the river Jordan because he expected that a miracle would be performed. The Jordan is for all of us the formation of clean, healthy, common-sense habits. Then we shall not need miracles.—Youth's Companion.

Home Remedies.

Every mother should be familiar with simple home remedies which can be used in times of need. It is not pleasant to be always dependent on a physician to ease every ache and pain.

To cure a ringworm rub the spot with milk from milk which grows wild. In a few days if this is persevered in the spot will entirely disappear.

When milkweed is not to be had put a copper penny in a tablespoonful of vinegar and let it remain until it becomes green; then wash the ringworm with this liquid several times a day until it disappears.

A sharp pain in the lungs or side can be driven away by applying vaseline and mustard in the proportion of two parts vaseline and one part mustard. Rub it together and spread on a piece of linen as you would an ordinary mustard paste. This is also excellent for a severe pain in the back of the neck, and has been used with good results for breaking up influenza.

To break up a hard cold at the start, take a hot mustard bath and go to bed, being careful not to take more cold afterwards.

Flaxseed tea with plenty of lemon juice and lemon sugar is very soothing to sore throats, and will often cure a hard cough.

Equal parts of honey, olive oil and pure home-made wine made from grape juice or currants is both soothing and strengthening for a bad cough.

Physicians are advocating the use of pure olive oil for weak lungs. It bids fair to take the place of cod-liver oil, and is thought by many pleasant to take.

Olive, as a food, are considered very strengthening for weak lung troubles. A glass of water drunk half an hour before each meal, and just before retiring will frequently regulate the bowels so those troubled with constipation will be all right.

Ripe fruit, as apples, peaches, pears and grapes, is a great regulator of the bowels. Those who suffer from long-standing constipation will do well to take a tablespoonful of bran before each meal.

There is no better cure for biliousness

than bonest tea, or that made from German chamomile. Drink freely of it for several mornings. Lemonade and any acid fruit are also excellent for biliousness, as well as raw or cooked tomatoes.

To remove the inflammation caused by running a nail into the hand or foot, apply a piece of salt pork immediately and bind on the part.—Health.

The Hot Sand Bag.

"Get some clean, fine sand and dry it thoroughly in a kettle on the stove; make a bag about eight inches square of flannel, all it with the dry sand, sew the opening carefully together, and cover the bag with cotton or linen cloth. This will prevent the sand from shifting out, and also enable you to heat the bag quickly by placing it in the oven or on the top of the stove. After once using this, you will never again attempt to warm the feet or hands of a sick person with a bottle or a brick. The sand holds the heat for a long time, and the bag can be tucked up to the back without hurting the invalid.—Health Culture.

Enteric Fever.

Enteric fever is usually caused by the introduction of a ferment into the intestinal canal, which by its products, called ptomaines, or poisons arising about fever, the fever being mild or severe, according to the amount of poison. Usually the bowels will be tender, and distended with gas, tongue coated brown, and considerable pain and uneasiness.

The indications for treatment are to reduce the fever and remove the ferment causing the trouble in the bowels. Sponge baths, an occasional tepid enema, if it does not cause pain, and compresses over the bowels, will all be gratefully received. The fever can usually be controlled by these measures. If the temperature is as high as 105°, a sponge bath every twenty minutes on the extremities, a cold compress on the head and a continued wet compress on the bowels, will be all that is necessary. This treatment must not be given heroically if the patient is inclined to be chilly.

An antiseptic should be taken within, and there is none surpassing in efficacy salol, three to five grains, four times a day.

In enteric fever the food should be carefully considered, and in the height of the attack should not be pressed. Delicate dishes of a bland variety will usually be borne, especially if the fever is not high. As a rule, buttermilk may be taken. Soaked milk with biscuits, provided the bowels are loose, and scalded milk alone, taken often, will be gratefully received. Egg-nog, rice water, beef tea and broth will also be admissible. Unless the patient be comatose, it is always well to give the food sparingly in the earlier stages of the disease. A few days of this kind of treatment will often terminate some of the severe attacks.—English Paper.

Greens as a Spring Tonic.

At the beginning of spring there comes an uncontrollable longing for fresh, green vegetables and salads. The same feeling possesses the sailor far away at sea—a longing which produces disease if neglected for too long a period. History tells of entire communities in the virgin forests of the new world who perished in winter from scurvy. In one case a colony from the Old World was saved by the discovery of a cranberry bed under the snow, out of which the fruit was quickly dug, and gave the necessary vegetable acid to the suffering colony.

In these modern days, when tropical fruit and green vegetables are brought to market in abundance in winter, one can hardly realize the suffering from scurvy after the long shut-in period in olden times. As late as the eighteenth century there was a scarcity of acid foods in the early spring. The rhubarb plant was then welcome as an anti-scurbutic, because it could be obtained much earlier than any fruit that ripens in fields, gardens or orchards. Its early name of spring fruit shows for what purpose it was chiefly used, as a substitute for stewed fruit. The value of the fresh, acid quality of the rhubarb makes it superior (on the score of health) to any canned, dried or preserved fruit, and it was known to our ancestors as one of the best anti-scurbutic foods that could be obtained. Today, when the horrors of scurvy are no longer to be feared in the civilized world, there is still, however, a suggestion of the old trouble that comes in the spring from the need of the good green herbs of the earth and of acid fruits.

Though rhubarb is no longer a necessity to health, it is a plant which should not be neglected, but stewed regularly when fresh, as a spring tonic, good for young and old. Remember to cut the rhubarb without peeling it. Season it lightly with sugar. Stew it slowly in an old-fashioned porcelain pipkin. Like lettuce salad, it is one of the best and most certain remedies for the tired, worn feeling of spring that can possibly be given the family.

Use salads freely at this season of the year, and stews of good green herbs, like spinach, sorrel and any pot herbs. Healthy people eat dandelion greens as eagerly as healthy animals eat grass. They fill a want that nothing else seems to do. People were healthier in the old-fashioned times, when they gathered the greens from the good earth and cooked them as soon as they were gathered.—Tribune.

Fresh Eggs.

After the first of March fresh eggs begin to become common in spite of all the attempts of speculators to get control of the markets. Fresh eggs are soon within the reach of every one. Omelette and poached eggs are luxuries which no one can prevent at this season of the year. Eggs delicately fried are not especially common in this country, though omelette, greasy fried eggs are common enough. Cooked in lard, as they frequently are to avoid their turning dark, they have a flavor that renders them unfit for food. Fried in butter they may be delicious, but they invariably turn dark. There is only one article that eggs can be fried in successfully. The good, old, range two tablespoonfuls of perfectly sound, sweet olive oil. When it is hot and smoking break into it one fresh egg. Turn it over with a table knife, fold the right side of the egg over the yolk and cook for a quarter of a minute longer. The egg may now be turned with a cake turner and cooked for a quarter of a minute on the other side. Slip it with a cake turner to a hot plate and it is ready to serve. If it is cooked any longer it will be overdone. If the egg is perfectly fresh the yolk will not break. Eggs that are so stale that the yolks break and separate from the whites are not fit for poaching or frying.

A delicious way to cook fresh eggs for the table in the spring is with mushrooms. These are always in market from the greenhouse if not from the field. A quarter of a pound of mushrooms is all that is needed to serve with twelve eggs. After peeling and trimming

the mushrooms melt a tablespoonful of butter in a saucepan. Add a teaspoonful of salt and a saltspoonful of white pepper. Then add the mushrooms, properly cleaned and trimmed, squeezing in two drops of lemon juice. Cover the saucepan and let the mushrooms cook for ten minutes on a slow fire. Add a tablespoonful of wine and simmer the mushrooms for about three minutes longer, or until the liquid has been reduced one-half. Now add three tablespoonfuls of cream and let the mushrooms boil up again. Dish the mushrooms in the center of a hot plate, without the liquid around them. Lay twelve poached eggs in a circle around the mushrooms. Pour the liquid of the mushrooms over them and around the eggs. This dish is nice without wine, simply served with the three tablespoonfuls of cream added to the mushrooms.—N. Y. Tribune.

Care of the Teeth.

Careful, intelligent care of the teeth is as necessary to the health as that devoted to any other part of the body. Fungoid growths which occur among the teeth are said to be a cause of dangerous diseases of the throat. At least once a week the teeth should be thoroughly washed out with a saponaceous dentine. Ordinary white castle soap is one of the best articles for this purpose. If it is used daily it may make the teeth yellow; therefore it is better to limit its use to once a week. It is one of the best things for destroying living organisms that are so liable to infect the teeth. The alkali of a mild soap also arrests decay by counteracting the acids of various food particles.

A simple excellent tooth powder, to be used daily, is made as follows: To one-half ounce of the best English prepared chalk, add one dram each of pulverized cuttlefish bone, pulverized Florentine orris root and pulverized borax and pure powdered sugar. Mix these ingredients to an even powder. Let the chemist season it with a few drops of oil of wintergreen. Put the powder in a large mouthed bottle and cork it tightly. One of the best waters for the teeth is tincture of myrrh used occasionally. Purchase ten cents worth at a time. After brushing the teeth thoroughly with powder put a few drops of myrrh in a tumbler of water. Rinse out the mouth and teeth well with this solution. None of the expensive French washes which are recommended for perfuming the breath and hardening the gums are better than this preparation of myrrh.—N. Y. Tribune.

Domestic Hints.

SOLES BAKED, ITALIAN STYLE.
For this dish select medium-sized soles, lay them on the table, the white side underneath, then proceed to cut off the heads on the bias; from this side suppress the gills and empty the sole thoroughly; cut off the thin tail end and scrape the surface with the dull edge of a knife to detach slightly the skin covering the tail, keeping the tail bone in position with the same side of the knife; scrape the skin with a towel, and tear it off violently with one stroke. Use a pair of large scissors to remove the small bones, the outside, and scrape the inside with a large knife, wash, wipe, and make a straight incision on the skinned side to the middle bone, then detach the fillets half an inch on each side. Butter a baking dish, lay in the fillets, having the skinned side down, and pour over two gills of white wine, salt and pepper; lay a few pieces of butter on top, and let the stock come to a boil, then set the dish into the oven for five minutes; when through lay six chicken mushrooms on heads in a straight row on top, cover with an Italian sauce and dredge over a thin layer of bread-crumbs; pour over melted butter and cover in a hot oven from twelve to fifteen minutes; then serve.

EGG OMELETTE.
To one cup of the chopped meat add one cup of fine breadcrumbs, one spoonful of finely chopped onion. Season with pepper and salt and a spoonful of melted butter; add enough milk to bind together. Have large gem pans well greased and nearly full with the mixture; break an egg carefully on the top of each one; dust with salt and bake eight minutes.

SAUSAGE WITH BUCKWHEAT CAKES.
Prick the sausages well and fry in a little bacon fat. Put them on a hot plate in a circle on the outside, leaving space for the cakes in the centre. Cook the sausages thoroughly two cups of buckwheat flour, one of wheat flour, little salt and three tablespoonfuls of baking powder; beat milk and water of equal parts to make the batter of the right consistency. Add a little molasses, which will give them a better color. Fry on a scapstone griddle and pile neatly in the centre of the ring of sausage.

POTATO SOUFFLE (CHAFING-DISH).
Mix a pint of mashed potatoes with half a cup of thick cream and the whites of two eggs, beaten stiff. Put two tablespoonfuls of butter in the chafing-dish, and melt very hot. Stir the potatoes in large tablespoonfuls. When brown on one side, turn, brown the other, and serve immediately.

MUSHROOMS EN COQUILLE.
Wash half a pound of nice, fresh mushrooms peel them and cut off the stems, cut the flaps into dice and put the stems in a saucepan with a cup of water and cook for ten minutes. While these are cooking put a heaping tablespoonful of butter in a saucepan, when hot add the mushroom dice and let them cook until tender, then add a dessert-spoonful of flour, and when it is cooked add the water the stems were boiled in, and salt and pepper to taste. If the sauce is too thick, add a little milk. Cook in a saucepan, and when done, add a little melted butter, put in the oven for a minute to brown.

EGG LEMONADE.
Two eggs. Juice of two lemons. One cup of snow or pounded ice. Sugar to taste. Beat the yolks of the eggs light, add sugar and lemon juice. Mix all into the ice and sugar and thin slightly with cold water. Whip the whites of the eggs to a stiff froth and beat all together as quickly as possible. This should be served immediately.

Hints to Housekeepers.
In place of the thick cotton pad which protected the dining-table so long is an asbestos pad, which insures the highest polish from damage from hot dishes.
Cold cream rubbed around the nails will counteract the tendency to crack and will keep the skin around the nails soft and fresh looking.
Rinsing the face and hands thoroughly after washing is quite as important as the washing itself, if the people who make beauty a study are to be believed. Soap must be got out of the pores or it will roughen and dry the skin and often aggravate the tendency to blackheads.
Candle shades decorated with transparent designs are preferred by many hostesses to solid colored ones for table use. The shades are made of paper, usually white, set with miniatures of old-time beauties and studded with jewels that gleam and glow against the mellowed candle-light. Paper shades of Empire shape are also common, with cut-out, painted, floral designs of silk gauze, set in without an inner lining. Another device, although better adapted to a lamp shade, may be employed for the candle. It is the application of cut-out cretione or silk floral designs on a white net foundation.
There is a rage for antique jewelry just at present and the passion for chains and strings of beads is growing stronger. All sorts of odd medallions and pendants are being worn that here-fore have reposed in cabinets, and a Zulu bracelet or an old Egyptian amulet, dinky and dull, is prized more than the daintiest of pearls or diamonds. In the hunt for odd and curious jewels of this sort it has become the fashion to browse on a white net foundation.
These things are usually to be found and may be

purchased cheaply, as they have rarely any intrinsic value. Some of the chains are very curious and the heavier ones may be worn as girdles.
Green peppers and tomatoes cooked together in a sauce are excellently suited to accompany boiled rice. Allow one green pepper for a cupful of tomatoes. Chop the peppers fine and add to the tomato pulp. Cook together with a heaping teaspoonful of butter, the juice of grated pulp of a small onion, salt and paprika. Serve without mauling. A little tabasco sauce or curry may be added. The peppers may be used in a similar way in stuffed tomatoes.
A drop or two of vanilla in the cocoa or chocolate cups before the liquid is poured will be found an improvement.

Fashion Notes.

Among the laces and nets used for fashionable dresses, waists and trimmings, are all- silk black antique, Cluny, Venise, Irish crochet, point Marquise, point Curri, Rittella, guipure d'art, Colobret, Flemish, Tenerife, Russian and Louis XIV. patterns, in insertion bands, edgings and appliques. Many of these laces include narrow sets of fichu, skirt borders, insertion bands and narrow strips for edging stock collars. The all-over nets suitable for gowns, blouses, yokes and undersleeves are in black, white, cream and Arabie or fleecy gray, and most of them have mauling hands to use for skirt seams, insertions between tucks or shirring, and for turn-over or top-collars made of lace and baliste.

Gray, ecru and white linen gowns embroidered in mercerized floss, rank among the fashionable styles for next season. A wide band of this trimmings borders the skirts of some of the French dresses. On others, three horizontal rows are let in on the skirt between ruffled tucks of the dress material. Narrow bands sometimes outline the seams of gored skirts, or the embroidery, in graceful trailing designs, is used to head an accordion-plaited or flat graduated flounce.

The revived style of fluting is used, as well as box, side and accordion plaiting, on skirts of Swiss muslin, French organdie, India mull and other transparent summer fabrics. Evening toilettes show fluted flairs alternating with five narrow horizontal stripes reaching to the hips from the skirt-edges. Above these is a yoke made of all-over embroidery, fine French shirring, bands of insertion and tucking in groups of three.

The skirt improver has reappeared now that more fullness is added to the back of dress skirts. This is in the shape of ruffles of mohair or fine hair-cloth set upon a closely gored petticoat. The ruffles are wide and moderately full on the lower half of the skirt, tapering gradually to just below the waist line. These improvers keep in place the lines of the box plait, or hold out the soft folds that fall from the gathers massed at the centre back of the skirt. The improver is fitted very closely on the front and sides, from belt to hem.

An effective French hat is of roses, green and brown fancy straw. It is draped around the curved brim with soft brown tulle, lightly dotted with minute gold paillettes. This drapery is caught at intervals by small bunches of dark green velvet leaves and shaded briar roses, with yellow hearts. A full choker of the tulle is set at one side of the hat, and under the brim is a drapery of the tulle held by a gold buckle.

Clan tartans appear among the new weaves in voile, etamine and French zephyr stuffs.
Among other Paris models that a Fifth-avenue milliner sets forth this week is a hat of stem-green tulle covered with dark green geranium leaves as rough and velvety in appearance as the natural foliage. It is trimmed with vivid red geranium blossoms and a broad Alsatian bow placed flat on the top of the low crown towards the back. A second model made entirely of tulle petals has as its only decoration a wreath of scarlet velvet holly berries.

An attractive gown worn at a recent debutante's reception was of pale beige blue silk satin, beginning in plain accordian plaitings at the top of the bodice (cut out a la Vierge), arching into graceful curves at the waist, and out again at the hips, and falling from thence to the floor in slightly expanding lines. Cream lace and black velvet ribbon trimmings were most effectively used on the gown, the opening in the neck was filled with ecru Venise net, and the elbow sleeves were mere gauze effects of lace and plaited silk muslin.

New blouse waists made of Cluny lace over linings of white silk cost from \$10 to \$25 each.
A Broadway importer has this week exhibited the following novel and attractive materials: Gold metal crepe de chine, printed crepe, Leda, black and white mousseline grenadine, voile Ninon, gold and silver brocade, medallion-patterned Lousine, shot damask satin, Dresden taffeta, embossed peau de soie, Shanghaï, Shanghai, and new weaves and combinations in Lyons-woven laces and silks.

Well-informed dressmakers recommend to their patrons who desire something in the way of a blouse waist that is not universally worn, a model of cream-white cloth trimmed with fringed shoulder and sleeve bands of silk embroidery in delicate Persian patterns. The waist is laid in vertical pin tucks, with narrower stripes of the embroidery introduced between every fifth and sixth row of tucking. Another handsome garment is the collarless long coat of white ladies' cloth, trimmed with stitching, white silk braid and filigree gold, or pure white taffeta silk accents. Other models of similar shape are made of English tweed, or royal blue shibbole, trimmed with white broadcloth strappings, pipings and white braid.

Shirring, plain or corded, takes the place of tucking on many of the latest French dress models.
Vacation time will bring out an assortment of handsome fancy wraps that will include hand-embroidered Monte Carlo jackets in white or opal gray canvas, white taffeta silk, and white wool or camel-hair coats, unlined and lined with various novel and attractive wares, and made with bishop or flowing open sleeves; perleries of silk, chiffon, brocade, embroidered linen, peau de soie or Liberty satin, with long scarf ends; and finished blouses in every sort of material, flannel-lined with embroidered or lace-trimmed stole and pointed girdle and fancy sleeves. The "Lady Curzon" coat is of box-plaited white satin, with drooping, deeply pointed cape collar of Flanders lace. The bodice is partly covered with long lengths of lace insertion, and in front is a quantum of Persian brocade, the designs outlined with gold and silver threads. The coat is loose with front and back, and fastens at the throat with an art nouveau clasp of Persian pattern, framed in gold and silver filigree.

One of the new weaves in etamine canvas has a rough hairy surface like an English frieze or camel-hair tweed, in two or three heather colors. At a little distance from the goods they have just this appearance, but examination shows a sheer, semi-transparent material instead of a heavy wool one. A French model exhibited this week shows a mixture of black, gray, white and a glint of red in this weave. The gown is piped with red silk and finished with large buttons of black and ivory, rimmed with cut steel. The dress is made up over a rich shade of claret-colored taffeta that gleams faintly through the meshes of the rough etamine.

French dress designers are making great use of pipings on many of their spring and summer gowns. Dresses of silk and light wool are piped with tartan plaids, and fancy volants in blue and white, brown and ecru, violet and cream color, are used to pipe rocks of etamine, voile and canvas. Shepherd's check silks are used in the same way, and buff, tan, fleecy gray, fawn, and other neutral-toned gowns are piped in white and cream with delicate embroideries in white mercerized floss.

Bands of white or tinted ribbon or narrow bias strips of bishops' linen fastened together make neat and inexpensive stock collars to wear with shirt waists. Whatever material is used, all of these collars show the barrister finish of one or two pointed ends.

All the new tailor cloths are so light in weight and so pliable that they are much like cashmere. India cashmere with the popular this season, and there are soft, delicate silks in cashmere colors, striped, or dotted in white, that are used for shirt waists, with skirt and jacket costumes of the cashmere.

Long, unbroken lines, panel effects and down-pointing bands and curves are given to

Our Lady Readers will Recognize This Picture.



A Fac-Simile of the One Printed on the Wrappers of

Dobbins' Electric Soap

The soap their mothers used to delight in using. Dobbins' Electric Soap is the same pure article it was when it was first made and cost up to 10 cents a bar. It is made of the finest materials and is as white as when it was first made. It is because of our interest in using some of the cheap trade loadings with resin or other adulterants, that is sold as soap. Dobbins' is the clean, pure, and the finest of all. It whitens the clothes, and preserves them. It is the greatest disinfectant in the world. Sold by all grocers.

DOBBINS' SOAP MANUFACTURING CO., Sole Manufacturers. Philadelphia.

Gowns made of canvas weaves, silk and satin foulard, taffetas, velvets, crepes de chine and other spring materials, by the use of braided or velvet ribbon, insertion bands and graduated designs in silk or lace applique, arranged upon the skirt to give the appearance of slenderness and height.

Peach blossom and violet blue (the mixed tints of the hydrangea) are a favorite color combination on French millinery, and among silk and China silks.

The light-colored, silk-and-wool canvas materials, etamines and mirlats are used in making gowns for the spring and early summer. Robe dresses of linen in many different weaves are conspicuous among the season's importations. These boxed patterns are decorated with lace and embroidery.—New York Evening Post.

The World Beautiful.

Lillian Whiting, in Boston Budget.
"We are invited to use the season of Lent in a resolute effort to attain the life to a higher pitch. Could I suggest a more profitable exercise for us, all than that we should resolutely test the reality of our higher conception of God by a systematic inquiry into the effect it is producing on our characters? No manual of self-examination is needed other than that provided by the Holy Spirit in the scripture of today. I suggest that we should, in the first week in Lent we might consider 'Suffereth long and is kind'; the second, 'Forneth not, seeketh not her own'; the third, 'Is not easily provoked, thinketh no evil'; the fourth, 'Rejoiceth not in iniquity, but rejoiceth in the truth'; the fifth, 'Beareth all things, believeth all things'; the sixth, 'Hopeth all things, endureth all things'.

It is a test that will touch every conceivable condition of our lives, every possible avenue of thought, word and deed."
"As we have the opportunity,—let us do good to all men."—St. Paul.

That wonderful test of seeing every event of life from the point of view of the will of God simply transforms and revolutionizes the entire scale of experience. It simplifies all perplexities, it offers the solution for all problems. It illuminates the small and the apparently insignificant occurrences which, nevertheless, contrive to play so large and often so determining a part in our days, as well as it places in high relief the great questions that beset one in his varied round.

The Hon. Geo. Starr Writes

NO. 3 VAN NESS PLACE, NEW YORK.
 DE. RADWAY—With me your Relief has worked wonders. For the last three years I have had frequent and severe attacks of sciatica, sometimes extending from the lumbar regions to my ankle, and at times to both lower limbs.
 During the time I have been afflicted I have tried almost all the remedies recommended by physicians and folk, hoping to find relief, but all proved to be failures.
 I have tried various kinds of baths, manipulations, outward application of liniments too numerous to mention, and prescriptions of the most eminent physicians, all of which failed to give me relief.
 On September, at the urgent request of a friend who had been afflicted as myself I was induced to try your remedy. I was then suffering severely with one of my old attacks. To my surprise and delight the application gave me relief, and after bathing and rubbing the parts, almost leaving the limbs in a warm glow, I went to bed, and in the morning I was entirely cured. Although I have slight attacks approaching a change of weather, I know now how to cure myself, and feel the master of the situation.
 (RADWAY'S READY RELIEF is my friend: I never travel without a bottle in my valise.)
 Yours truly,
 GEO. STARR,
 Emigrant Commissioner.

Radway's Ready Relief
 Sold by all Druggists.

RADWAY & CO.,
 55 Elm Street, NEW YORK.

POETRY.

ONE ON THE APRIL SHOWER.
 Think you the thrushes in the wood,
 The robins in the clover,
 Sing sweetest after April showers
 Because the rain is over?

Think you the oriole has reached
 His highest note of gladness
 Because the sun is shining now,
 Where all the sky was sadness?

Think you the lark has soared aloft
 To sing his mellow story
 Because the cloud is past, and shines
 The sun in kindly glory?

Ah, not for these the bubbling thrush,
 And robins in the clover,
 Have broken into gladdest song
 When April showers are over.

But now that crystal raindrops hang,
 Like cocktails, on the thistle,
 Each thrushy little bird has sung
 A chance to wet his whistle!

—Aloysius Coll, in Lippincott's.

WITH OUR IDEALS.
 In the beautiful realm of ideals,
 What sweet bliss the fond heart ever feels,
 There we find in perfection sublime,
 Souls that never descend to a crime.

We with sweet admiration are filled,
 And the soul comes to love and to will,
 To strive to be like our ideals;
 But then, oh! how humanly feels.

Its own weakness that keeps it below
 The proud heights upon which we would go;
 But the soul ever upward is led
 By ideals that are leading ahead.

Let us ever strive for ideals,
 When the heart nobler sentiment feels,
 And our mission will never be vain,
 Though ambitions we never may gain.

MARTHA SHEPARD LIPPINCOTT.
 Moorestown, N. J.

THE EARTH AND MAN.
 A little sun, a little rain,
 A soft wind blowing from the west—
 And the woods and fields are sweet again,
 And warmth within the mountain's breast.

So simple is the earth we tread,
 So quick with life and love and fame,
 Ten thousand years have dawned and fled,
 And still her magic is the same.

A little love, a little trust,
 A soft impulse, a sudden dream—
 And life as of a desert dust,
 Is fresher than a mountain stream.

So simple is the heart of man,
 So ready for new hope and joy;
 Ten thousand years since he began,
 Have left it younger than the boy.

—Stophard A. Brooke.

OLD FRIENDS.
 Where are they scattered now,
 The old, old friends?
 One makes her dwelling where the maples grow,
 And mingles strains from solemn forests low;
 Yet never from that pine-crowned land of snow
 A message sends.

Some meet me off amid
 Life's common ways,
 And then, perchance, a word or smile declares
 That warm hearts thro' beneath their load of care
 For love grows on, like wheat among the tares,
 Till harvest day.

But "some are fallen asleep"—
 The words are sweet;
 Oh, friends at rest beneath the blessed sod,
 My feet still tread the weary path you trod,
 Ere yet your loving souls went back to God.
 When shall we meet?

Oh, then, divinest friend,
 When shall it be
 That I may know them in their garments white?
 And see them with a new and clearer light,
 Mine old, familiar friends—made fair and bright,
 Like unto thee? —Sarah Doubney.

THE SOUL'S TRUE VOYAGE.
 Wouldst thou, my soul, seek voyage make
 Of life's tempests, and of life's strife,
 And wouldst thou break the storms that break
 To seek or threaten thee?

Wouldst thou with steady helm pursue
 The course against wind and wave,
 With stout and compass true,
 With port and starboard brave?

Wouldst thou, when seas are calm and bright,
 And all around thee play,
 Be content with that calm delight
 The things from hope's ray?

Mas. R. C. H. and his Guide,
 His guide and his light;
 His prayer with him abide;
 His guide and his light.

O, then, in storm or calm,
 His guide and his light;
 His prayer with him abide;
 His guide and his light.

—Roger H. Lyon.

Miscellaneous.

Seraphim's Substitute.

"Come long, nighgals; you're lost!" he all
 Somebody's g'wine on inside you can't 'ford 'tude
 miss!"

Almost before the last whispered word slipped
 from his comrades' mouths the half-dozen indolent
 bucks, sprawling in the March sunshine on the
 south side of Big Rock Church, made a dash
 for the door, and, having gained it, tiptoed cau-

tiously in and edged into the crowded back seat.
 The sugar-making season was at its height in
 Col. Theodore Dent's two camps. The Three
 Oaks sugar orchard of a hundred vigorous trees,

the south hollow, was in the hands of the
 Greens, Barlow and Betsey and their son and
 daughter, Israel and Ivory Love, and the orchard
 on the north hillside, the Cold Spring camp, con-

sisting of fewer than fifty trees, a quarter of a
 mile away from the other camp, was run by old
 lame Luke Swinebrood, Maria, his wife, and the
 niece, Seraphim. The molasses yield from the
 Three Oaks camp was naturally more than twice

as much as that of the north camp, and in addi-

tion the Green family looked too well to its
 own interests at each week's dividing time, well
 knowing that good-natured, earnest Colonel
 Dent would say nothing when he got less than
 half the sweets. Old Luke, on the contrary, made

his weekly division accurate to a drop.
 Ivory Love Green had reckoned on some
 "fine" summer clothes when the sugar-making
 season was over and the superfluous sweets all
 sold, with a degree of certainty. Seraphim

Swinebrood wanted fine clothes, too, and wanted
 them bad, but old Luke's rheumatism afflicted
 him so much in the late winter that he could
 work but little, and part of the camp proceeds,
 the greater part, had to be sacrificed to the sugar
 and coffee gods.

Early in March there came a two days freeze
 that ended in an afternoon thaw. About two
 o'clock in the night a loose shingle above Seraphim's
 bed in the loft permitted a bit of melting
 ice to drop directly on her face. She awoke with
 start, and as the drip of the little brook, gurgling
 at the foot of the hill, fell on her eyes, she

wondered drowsily if the sap had begun to run.
 "No, my trees is on de cold north side," she
 reflected; "dey won't run befo' de sun strikes
 em tomorrow noon, but dem Green niggers'
 trees is runnin' now, I'll be wiled to bet a dym!

Suddenly something prompted her to rise,
 throw on her clothes, her rusty hood and shawl,
 and in her stocking feet creep stealthily down the
 ladder leading from her loft and past her foster
 parents, who snored heavily in the lower room.

The door once closed behind her, she drew on
 her shoes, and taking up two big tin buckets went
 hastily to the north sugar camp. She stopped
 by a tree and felt the sunbaked spile—the
 ice in it was hard as a nut. Quickly she de-

clisively she lifted her buckets again and set off
 towards the Three Oaks camp. The water
 dripped noiselessly in the palls there; some of
 them were already full. Seraphim hurriedly
 filled her two buckets and tramped back to her
 own camp, where she poured her precious con-

tents into an empty barrel. Her arms soon ached
 and her feet grew heavy with weariness, but she
 persevered, until at last the barrel was brimming
 full of water carried from the Three Oaks camp
 and there was a suggestion of pink in the east.

As she left the hollow, laboriously carrying the
 last two buckets, her feet crunching noisily
 among the frozen pine needles, she felt that her
 other footsteps sent a faintness over her. She
 looked fearfully behind her—nothing living was
 visible, although from her excited fancy the dog-

wood branches waving in the full light of the
 moon looked like human hands pointing after her.
 Clip Cummins stopped at the Swinebroods' the
 day, and at the earnest solicitation of the old
 people remained to partake in the midday meal.

"I jes' dropped in," he explained, "tuh see if
 you all didn't need some wood out uh millin'
 and de wood is scarce, and de husband—S. B.
 Hackley, in N. Y. Evening Post.

"Lak' mighty well tuh hab you holt saw some
 wood at de camp dis evenin', Clip, ef you will. I
 kin git ef fur ef de camp wid my legs, and ef
 set on uh log and saw fast tuh," said Uncle
 Luke. "You' pow'ful good tuh us ole folks,
 boy; de ain't many youngsters as thoughtful!"

Clip would have blushed if his inkly skin could
 represent at this apparent compliment. He well
 knew and suspected that Uncle Luke knew that
 his solicitous attentions rose from a wish to be
 near Seraphim rather than from a charitable
 desire to help the afflicted.

He drank coffee and ate a slice of pie, and
 then, happy that Seraphim had poured it, and
 despite her scornful air his look of wistful admi-

ration rested on her face during the entire meal.
 And to her intense disgust during the afternoon
 at the camp she caught his adoring eyes on her
 whenever she turned in the direction of the two
 woodsewers.

"When I gets my summah outfit," she mused
 over her steaming kettles, "my clip hab wid
 daisies on hit and de pink lawn dress, wid black
 velvet trimmin' and such likey boys as Hiram
 Badgett, and Lish Swope, and Grent Carter is
 standin' 'round knee deep beggin' tuh my com-

pany I'm jes' g'wine lak' dat far-faced, long-
 necked, shufflin' Clip Cummins kum tuh good
 and all I kin g'wine 'rah him hangin' 'round."

There was a strain of Indian blood mingled
 with the white and the negro blood in Seraphim's
 veins, infusing a clear olive in her complexion,
 giving grace and symmetry to her figure, a dainty
 smallness to her hands and feet, a bright, gir-

lish black eyes, and withal a proud and haughty
 demeanor that, while it rendered her an irresist-

ible beauty in the eyes of her male acquaintances,
 was displeasing to her youthful female associates.
 Seraphim's pride in her gown and her gait
 came down some day," they hopefully predicted.

Sunday, the day of the monthly meeting at Big
 Rock, found Seraphim and her aunt and uncle,
 clad in their best and in good spirits, seated in
 the old blue spring wagon, and with merriment
 and laughter in the direction of the church of
 which they were all members in good standing.

It was a proud thought to the Swinebrood
 family that none of them had ever been "before
 the church" for any misdemeanor.

After the unusually short sermon the pastor
 announced that a brother had brought in a charge
 against one of the members that required inves-

tigation and he requested that the accusing
 brother and his witnesses come forward. The well-
 known deacon of the left front bench, while the
 four deacons occupied the front bench to the right.

This done the preacher solemnly said:
 "Brother Green will please lay de complaint
 'fo' de deacons representin' de church."

"On Monday mawnin', bredderin'," Barlow
 Green pompously and dramatically began, "long
 'bout uh quarter of an hour befo' sun-up I tuk de
 buckets and me and my son Israel went tuh de
 Three Oaks sugar camp and me and my folks is
 liered tuh de water. De water had been runnin' all
 night and ez we had overslept ourselves we
 'loved tuh fine de palls all most fully and run-

Colonel Dent had resurrected a pair of men's
 "Ant-Maria went along, and Barbara Warren
 sympathetically kept her company. A number
 of other matrons muttered distressed "Uh
 mess!" but not a few of the younger spirits to
 whom Seraphim had been an unconquerable
 rival giggled merrily. Grent Carter, Hiram
 Badgett, and a half-dozen of the seaux looked
 somewhat disturbed, while Clip Cummins, sitting
 in open-mouthed stony, would have served as a
 model for a statue of misery.

"We is found de young woman, guilty of willful
 theft," the spokesman declared gravely and
 importantly, and proceeded to detail the punish-

ment to be meted out to the delinquent. Ten
 dollars was to be imposed as a fine—one-half to
 be paid to the owners of the confiscated sap, the
 other half to go into the treasury of the Big Rock
 Church. In addition to paying the fine, the
 offender was to remain for the space of six
 months away from any town whatever, and if at
 the end of the time she could bring certificates of
 good behavior and prove her genuine remorse
 away from any towns, as stipulated, she would
 be received back into the church from which she
 was now summarily turned out.

There was a low murmur of conversation like
 the buzzing of bees, which was silenced by the
 preacher again rising.

"Bredderin' and sistahs," he said impress-

ively, "jestice, de Book say, should be temper-

ed mercy. De offender is young—she is never
 been guil' of a misdemeanor befo'. De punish-

ment is heavy—too heavy tuh hah shoul-

ders. I want tuh axe de conf'ation of de willin'
 let somebody set ez hah substitute of dat some-

body willeh. I want tuh axe de conf'ation of de
 pastor's proposition agreed to. The preacher
 then looked over the crowd.

"Who willin' tek de punishment 'stid dis
 maiden?" he asked.

There was a long silence. To pay over ten
 hard-earned dollars (heavy punishment itak), to
 stay away from the delights of town for six
 months, to promise exemplary behavior for that
 length of time, and to do it! Hiram Badgett
 could not, neither Grent Carter nor Elihu Swope
 could, neither Grent Carter nor Elihu Swope

"Who willin' tek de punishment 'stid dis
 maiden?" repeated the good man. Then with a
 great shuffling of feet Clip Cummins pointed him-

self out as a candidate for the punishment. He
 was wounded and mistreated a thousand times—and
 came forward, with great beads of sweat on his
 black forehead, his big hands trembling.

"Lay de punishment on me, sistahs and bredder-
 der!" he cried, and then he said humbly, "I's
 hah substitute!"

And thus it was settled. Seraphim went to
 church and town when she got ready, and Clip
 stayed at home and worked and hoped.

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capering up and down in the wildest way, he
 scampered off, the two boys in hot pursuit.
 Away to the hayrack he sped, and the boys
 soon dug out another hiding place, and so he went
 from one hiding-place to another, while mamma
 sat on the meal chest and laughed until she cried
 at his funny antics.

When the last child had been found, then with
 shouts and laughter and repeated huggings
 "George!" was called to mamma to be praised.

"Wasn't that funny?" "Did you ever see such
 a smart lark in all your life?" "Aren't you glad
 you came out?" were the questions showered
 upon her, and mamma had to own, that cer-

tainly was very funny, and that she thought
 George Washington quite worthy of his name.
 K. M. M.

How a Lark Learned.
 A baby lark had got out of its nest sideways—
 a fall of a foot only, but a dreadful drop for a
 baby.

"You can get back this way," its mother said,
 and showed it the way. But, when the baby
 tried to leap, it fell on its back. Then the mother
 tried to leap, it fell on its back. Then the mother
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the island, and every prudent bride tries to have
 a supply on hand.

"The contractor for the New York rapid
 transit subway recently stated," says The
 Electrical Review, "that owing to the great
 developments in electrical art, a generation of
 electricity is now only three years. This is a
 startling announcement and sets one to thinking.

Many become of all the old machinery and who
 pays for the new? How long will it be before
 a company can install a plant and feel assured
 that the machinery will not have to come out
 within a year or two? Does not this continual
 scrapping of machinery mean a loss some-

where?"
 Those who have had no practical experi-
 ence in the use of liquid fuel are often surprised
 at the elaborateness of some of the methods em-

ployed to secure efficient combustion of the oil.
 One of the latest is the Orde system, which is em-
 ployed in electrical plants. First, the oil must be freed
 of all water, and then it is pumped into a tank
 as perfectly as possible, from water. This is done
 by preliminary settling in a tank. From the tank
 the oil is pumped, under a pressure of sixty
 pounds to the inch, into the burners. On its way
 it is heated to a temperature just below its boil-

ing point, and then it is pumped into the burner
 of the burner, it is met by steam and air
 heated to 600°, or more, and thus is entirely
 converted into vapor. In this form it is sprayed into
 the flames and consumed.

The Horse.

Splan on the Horse.

The celebrated trainer and reinman, John Splan, recently delivered a lecture to the students of the Illinois Agricultural College on the subject, "The Horse as He Was, Is and Will Be." In substance, the lecturer said there would never be a horseless age, as there was more pleasure in driving a fine horse than in riding in the costliest automobile.

"I believe that the horse of the future will be bred from the American trotter, not as a race horse, but as a utility horse," said Mr. Splan. "Austria is said to have the best horses in the world, but they have American sires. I sold a horse for \$15,000 to the Austrian government, and his colt was sold for \$25,000 and made \$30,000 on the track in America. In Austria the government controls breeding. In Russia the government even controls trading, making it a source of revenue.

"I believe in kindly treatment and early education. Take the colt and teach him gentleness and kindness by light work. I worked eight years training Karus, and as a result it was no more physical effort to drive him in a race than it was to play the violin. I never knew that horse to make a mistake.

"I began working with horses when I was young. I got \$4 a month, and I was the most overpaid employee you ever saw. I have learned that nervous force makes speed. The development of this force has brought the speed from three to two minutes, and I believe it will be bettered. The higher the civilization the higher the class of horses. The Indian is rough, and so are his horses. The romantic tales of the swift Arabian steed are all bosh. The English cob horse is greatly prized, but he is American. The Britons get their horses in America. The European horses have better form than ours, but they are too slow.

"There is a great future for the American horse. Exports are increasing, and a horse may be sent to Liverpool for \$30 and taken care of too. Barnum introduced the American horse in England. The first knowledge of general utility horses came with this generation. The American trotting horse has better breeding capabilities for a general utility horse than any animal ever produced. A person living with horses will be bettered. They are not mean naturally. Treat them well."

Said a leading prospective exhibitor at the coming Boston Horse Show, speaking of the demand, present and future: "The market demands a ride-and-drive horse, well-mannered, tractable, a good looker and easily handled by a woman. We have not the continued, well-cultivated traits and the even spread of population as in Europe, and the bulk of our saddle owners are forced into the cities rather than to the many country homes, as is the case in England. Neither is there the same demand here for a saddle horse as in 'hant a bit,' although F. M. Ware says the best American hunter he ever rode was a brown stag by Smugler, with a record of 2.14, dam Ella Killwood (2.29 to road wagon), which was at that time a world's record. This good horse was up to 250 pounds and cost \$1600; could gallop and jump; could not trot or pace, but had all the peculiar endurance of the great American trotter."

As a sire of standard speed and of stallions and mares that have produced standard speed, Nutwood outranks all other stallions that have ever lived. The new Year Book credits him with 133 standard trotters and thirty-five standard pacers, a total of 168. He is also credited with 133 sons that have sired 432 trotters and 311 pacers, which have taken records in standard time. His daughters have produced 202 performers that have taken standard records, 153 of which are trotters.

It is announced that the famous Robert Bonner farm, near Tarrytown, N. Y., is now in possession of Robert E. Bonner, who, it is believed, will engage in horse breeding.

William Pollock of Pittsfield will judge the trotting, roadster and road rig classes at the Boston Horse Show the week of April 20.

Peeler Patron (2.12) is the only New England pacer whose owner has a nomination in the Brighton \$10,000 stake.

A. C. Hawkins, South Lancaster, Mass., has sold his trotter Regal Baron (2.29), by Baron Wilkes (2.18), to J. E. Brown, Portage Prairie, Canada, for \$2000. Regal Baron has beaten 2.20 in his work and gone quarters in 32 seconds.

Notes from Washington, D. C.

The simplest seed tester is one described by Mr. A. J. Pieters of the Department of Agriculture. It consists of two soup plates and a piece of flannel. Thoroughly wet the flannel and lay it over the bottom of one of the plates. Count out on it one hundred seeds, and lay over this another piece of wet flannel. Turn the second plate, a slightly smaller one, upside down to act as a cover and to keep the moisture in. Now simply keep the machine warm—the warmth of an ordinary living room—and prevent cooling off at night if possible. If ninety seeds do not germinate, the quality of the seed is below what it should be; it is probably a mixture of new seed and left-over seed of years past. Notice should also be taken whether the good seeds all sprout vigorously, as seeds of low vitality will make poor plants.

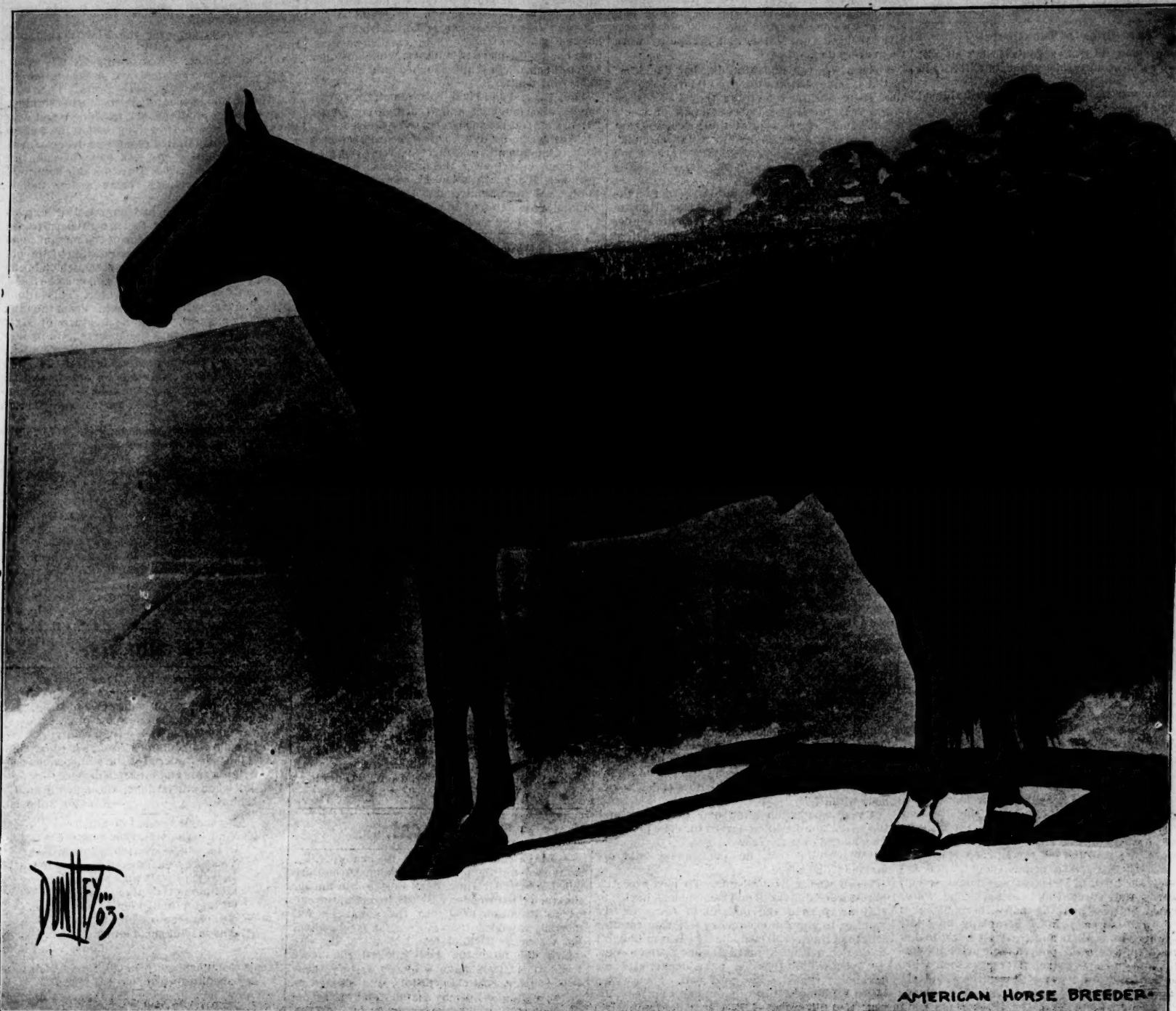
Consul-General Mason at Berlin, who always writes readable reports, has sent a statement to the State Department on "Potato Culture in Germany," which gives some interesting facts. In 1901, over seven million acres in the German empire, or twelve per cent. of its arable land was planted with potatoes, which, in proportion to the population, is about five times the potato acreage of the United States. The German potato crop in 1901 was fifty million tons. Potatoes are used in various ways in Germany. About one-half of the product is consumed at home as human food; much of

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the crop is made into alcohol; potatoes are also sliced and dried, and have thus become a staple article of food for the German navy and army, and for the colonists of Africa and Asia. Large quantities of potatoes are also used for stock feed in the place of corn, and considerable amounts of starch-potato flour are made. There are some three hundred potato-starch factories in Germany. The alcohol from potatoes is used for all sorts of things, from lamp-lighting, where alcohol vapor burns with an incandescent flame, rivaling the electric light, to fuel for cooking-stoves and for sea-going launches. Mr. Mason states that the German bureau of agriculture has lent itself to elaborate experiments year after year until the whole system of planting, cultivating and harvesting potatoes has been reduced to exact practical methods.

How to make English cream cheese is told by Major Alvord in his cheese bulletin, which is about to be issued by the Department of Agriculture. To make this cheese, very thick cream should be poured into a linen bag and hung up in a cool room, with a vessel under the bag to catch the whey. The air in the room must be pure as the cream really absorbs odors. When the whey is pretty well drained off the bag should be twisted tight and tied so as to further dry the curd; then after twenty-four to forty-eight hours, according to temperature and the consistency of the cream, the cheese is ready to eat and may be moulded. This is hardly cheese, however, as no rennet is used, perhaps it should be called "sour cream curd."

A simple, home-made cheese, according to Major Alvord, is "French cream cheese." Enough rennet is added to the morning's milk, at a temperature of 70°, to coagulate in two or three hours; it is then left for twenty or twenty-four hours. Then pour off the whey and cut the curd into slices and lay it in an ordinary hair sieve to drain. Add cream, not more than that from a quantity of milk equal to that first coagulated. Mix the curd and the cream in a bowl by mashing with a potato-masher until a uniform paste is obtained. This is then placed in wicker moulds or baskets lined with muslin. This cheese is used fresh. If kept several days, it must be put on ice.

It is again time to examine every apple tree to see whether the borers are working. In fact, if we would not lose a tree occasionally, we must make a good many annual inspections of the trunks near the ground, and if there are any traces of brownish sawdust on the surface of the ground or slightly discolored dark spots in the bark, it means going through the orchard with knife and wire. There are two borers, the round-headed and the flat-headed, but their habits in the main are similar, and the eggs of the moths are deposited along about the first of June. It is possibly not a bad preventive method to hill up the trees seven to eight inches during May when the earth is soft and it can be moulded closely around the trunk. This will keep the moth from laying its eggs at the actual juncture of the trunk with the roots, which is a favorite place, and whence it is particularly difficult to dig out the borers. Then a little later, the hills can be pulled down.

If it is possible to put a sufficient supply of water on to a garden spot it would be an experiment well worthy any farmer's trial, even if it involves considerable labor and some expenditure in arranging to get the water on the land. A rich garden spot with ample water will reproduce enormous yields. The production of some of the Western farms, under irrigation, is simply fabulous. If it is concluded to try the experiment of watering a one-fourth or one-half acre patch, a little different treatment may be accorded the soil than where the natural rainfall is to be depended upon. In the first place, the ground should be made as rich as possible, for if the water supply is good there will be no danger of burning the crops. In connection with the application of fertilizers and manures, the ground should be plowed

to an extreme depth. It would be a good idea to subsoil the land; if a subsoil plow is not available, follow an eight or ten-inch furrow with a heavy bull tongue, loosening up the ground to a depth of from twelve to sixteen inches. It will take some little experimentation and experience to become a successful irrigator, even on the scale of one-half an acre, but the yield which can be produced will more than pay for all the work and trouble. The only question should be, is there an available water supply? It can be depended upon that an acre will require eighteen inches and probably two feet of water, two-acre feet, that is, the land will have to be covered over two feet deep with water during the growing season.

So many new houses throughout the country stand out bare and forlorn like a lighthouse on a reef. If trees are planted around them they are usually little slips stuck in the ground, receiving no care and attention, and with grass growing up around them so that before they furnish any grateful shade the house is an old one. Man leaves a tree or two in his pasture lot under which the cattle retire and chew their cud in the heat of the day. Why should he not be as thoughtful of his own and his family's comfort? By a little extra work shade can be produced in a very few years. Dig a large and deep hole and, using plenty of well-rotted manure, transplant an elm or a locust or a maple or a poplar tree, six, eight or ten inches in diameter; give it some water the first year and always plenty of cultivation and stimulation, and it will put out eighteen to thirty inches of new growth every year. It is usually possible to get a large tree near at hand and with a ball of two or three bushels of earth clinging to the roots. This is very easily done if the tree grows in clay soil.

Bad roads are a heavy tax on the farmer. He has to haul small loads and waste much time in the hauling.

Professor Majors of the dairy department of the California State University advises the use of hay in raising dairy calves, to the greatest possible extent, for the encouragement of the development of the digestive organs.

For young chickens, feed often but a little at a time; keep the chickens hungry, but do not let them hunger.

Those who are interested in the growing of sugar beets and the production of beet sugar, as well as the cane-sugar people in Louisiana, claim that the defeat of the Philippines tariff bill in the Senate, which provided for a fifty per cent. reduction of duties on sugar and tobacco coming into this country from the Philippines, was fully warranted in view of the large and growing sugar industry of this country. The duty on sugar from the Philippines therefore remains at seventy-five per cent. of the rate charged on sugar from other countries.

Feed the grain on the farm and keep the soil fertility intact. Every ton of corn shipped to market loses the farm thirty-three pounds of nitrogen, twelve pounds of phosphoric acid and seven pounds of potash. Figure this out according to the analyses on the fertilizer bags and see how much the farm is losing.

GUY E. MITCHELL.

Great things are prophesied of the new law which permits trolley lines in Massachusetts to carry freight after having obtained the consent of the town authorities and of the State railway commission. In some instances it is planned to take loaded freight cars direct from the steam road, conveying the freight without unloading to the customer's very door. In the same way empty cars would be delivered close to the farms from which produce is to be shipped. Hundreds of small towns, villages and settlements would thus be furnished with direct traffic connections. It is to be feared, however, that few of the trolley lines are built strong and solid enough to endure much heavy freight travel. Some of them would certainly need to lay new and heavy rails and better ties the entire length of the line before they could handle business of this kind. But some of the new lines are especially well built, and may be able to handle freight if the schedules can be arranged without too much hindrance to passenger traffic.

The renewed outbreak of cattle disease in New Hampshire is proving quite a serious matter, the infected herds so far including nearly three hundred members, and new cases still being reported. So far all the cases are in Hillsboro County and a few towns adjoining, but as yet there can be no certainty that scattered cases may not be found elsewhere in the State. New England farmers are disappointed at the persistence of the epidemic which at one time was thought to have been wholly stamped out. The end is probably not far off now. The most disquieting feature is the fact that this new outbreak, including at least a score of herds, was not discovered until some of the diseased cattle had been shipped to markets, where there are special inspectors. It may be inferred that under ordinary conditions cases may not always be immediately reported, as they should be, to the cattle bureau or committee. Owners are naturally in no hurry to invite inspectors to kill their cattle, break up their milk business and overturn things generally, without adequate repayment. Here, perhaps, is shown the mistake made by the United States officials in paying only seventy per cent. of the value of cattle killed. Full payment would have taken away the leading obstacle to report of new cases by the owners, and quite likely would have in the end proved the least costly plan.

New Publications.

A really helpful, complete and up-to-date book on breeds and judging has been a serious need for some time. Mr. John A. Craig's high-grade volume, "Judging Live Stock," leaves little to be desired. The numerous photo engravings of all breeds of cattle, horses, sheep and swine are so clear and life-like, and the descriptions and directions so accurate and complete, that it would seem any farmer's boy might learn all about live stock without any other teacher. It is a book which must be seen to be appreciated. Published at Des Moines, Ia.

The vast increase of irrigation practice has brought forward a host of new problems in law, usage and method, the situation being especially complicated where the irrigated regions and the water sources are in different States. Elwood Mead's new book, "Irrigation Institutions," discusses the questions created by the growth of irrigated agriculture in the West, and outlines methods for future development. The need of co-operative organization is urged. The best account of the Angora goat seems


to be the recent volume by George Fayette Thompson on "Angora Goat Raising," including a very complete chapter on milk goats. It is a well-printed, fully illustrated volume, and covers all branches of the subject in various parts of the country.

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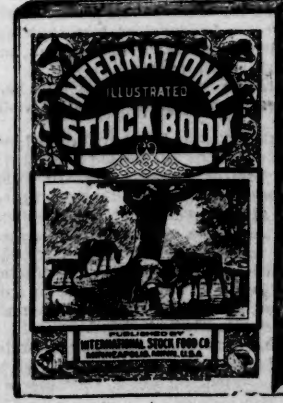


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